



# **THE FORMER MEMPHIS DEPOT COMMUNITY INVOLVEMENT PLAN**

**December 2004**

Prepared For:



**Defense Logistics Agency  
Defense Depot Memphis, Tennessee**

Prepared By



**MACTEC Engineering  
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## **EXECUTIVE SUMMARY**

The Defense Distribution Center (DDC) has prepared this Community Involvement Plan (CIP) to assess the progress of the community involvement activities described in the 1999 Community Relations Plan (CRP) and subsequent revisions, and to ensure the communication and community involvement activities reflect the current status of the environmental cleanup program. The name change to this document (from CRP to CIP) reflects the language used by the Environmental Protection Agency (EPA) in its Superfund Community Involvement Handbook.

The specific objectives of a Community Involvement Plan are to:

- Provide the community with environmental information;
- Maintain two-way communication between the Depot and its neighbors;
- Respond to community concerns and needs that may arise during Depot cleanup efforts; and
- Provide effective management of the community involvement program.

This update consists of three sections. Section 1 describes the purpose of the Community Involvement Plan, and provides background information about the Depot and the surrounding neighborhoods. Section 2 discusses what was learned from community interviews conducted in the June 2004 to identify any community concerns regarding the environmental program at the Depot, and seek input from the community for community involvement activities to respond to these concerns. Section 3 provides an outline for a community involvement strategy.

The Depot operated for 55 years before closing in 1997. The Depot's mission revolved around providing a complete range of commodities needed by the Department of Defense (DoD) and some civilian agencies. The site consists of the Main Installation (578 acres) and Dunn Field (64 acres). Past operations and activities at the site have impacted the local environment.

The results of the community interviews conducted in 2004 indicate that, overall, community stakeholders are satisfied with the environmental cleanup of the Depot. They are satisfied with the information they receive and the work being done. Awareness levels are very high, with nearly everyone expressing some knowledge of the environmental issues. The results of the interviews tell us that the community is more interested in what possible health issues may be associated with the environmental conditions than the cleanup program. It is evident that community outreach tools, such as the newsletter and fact sheets, are effective in reaching the community. Participants generally view the Depot's credibility as neutral or positive. However, few understood how far along the Depot's environmental cleanup program has progressed towards completion.

It is vital that the Depot's environmental team clearly communicates that: federal and state regulatory agencies have approved cleanup solutions for the Depot; that work to install final cleanup remedies has started; that the Depot distributes timely information about the progress of the cleanup; and, that the Defense Distribution Center will ensure completion of the cleanup.

Planning an effective community involvement strategy requires identification of goals and a commitment to the activities that will help achieve those goals. Those goals are:

1. Fulfill information availability requirements;
2. Build positive interest in the cleanup program;
3. Build community awareness about community involvement opportunities; and
4. Maintain regular information channels.

The goals can be reached by continuing to communicate the Depot's environmental cleanup progress. Each goal has specific actions listed in the Community Involvement Plan to help ensure that sufficient effort is made to keep the community informed.

The following activities are currently being used in the community involvement program:

- Point of contact for community involvement and general environmental cleanup program information
- Information Repositories
- Administrative Record
- Public comment periods for all major documents
- Public meetings and Community Information Sessions as required
- Restoration Advisory Board meetings
- Communication with Community Stakeholders (Memphis Light, Gas and Water, Memphis/Shelby County Health Department, City of Memphis, State Representatives)
- EnviroNews newsletter
- Fact Sheets
- A mailing list of individuals who receive information about the environmental cleanup program
- Mailings to home owners and businesses around the Depot
- News Releases
- Community Information Line
- Website

Information Repositories are currently maintained at the following locations:

- Memphis Depot Community Reading Room, 2163 Airways Blvd., Building 144, Memphis, TN;
- Memphis/Shelby County Health Dept., Pollution Control Division, 814 Jefferson Avenue, Memphis, TN; and
- Cherokee Branch Public Library, 3300 Sharpe Avenue, Memphis, TN.

These locations will be consolidated into a single location as community usage declines. The Information Repositories contain copies of the Community Involvement Plan, Restoration Advisory Board meeting minutes, news releases, fact sheets, and all final documents submitted to the regulatory agencies.

The Depot's Community Involvement Plan is designated as a primary document under the Federal Facilities Agreement (FFA) and this update has been reviewed and approved by the Environmental Protection Agency (EPA), the Tennessee Department of Environment and Conservation (TDEC) and the Defense Logistics Agency (DLA) to ensure compliance with applicable federal, state and DoD community involvement requirements and guidelines.

The point of contact for all questions regarding the Memphis Depot and the cleanup program is Michael Dobbs, DDC Environmental Manager, The Memphis Depot, 2163 Airways Blvd., Bldg. 144. Memphis, TN 38114, (717) 770-6950; email: michael.dobbs@dla.mil. Information can also be obtained from the Memphis Depot website at [www.ddc.dla.mil/memphis](http://www.ddc.dla.mil/memphis).

## TABLE OF CONTENTS

	<u>Page</u>
<b>EXECUTIVE SUMMARY.....</b>	<b>1</b>
<b>1.0 INTRODUCTION .....</b>	<b>1-1</b>
1.1 PURPOSE OF THE COMMUNITY INVOLVEMENT PLAN UPDATE.....	1-2
1.2 SITE LOCATION AND DESCRIPTION.....	1-2
1.2.1 Installation Restoration Program (IRP).....	1-3
1.3 COMMUNITY PROFILE .....	1-4
1.3.1 Community Demographics .....	1-4
1.3.2 Real Estate Demographics .....	1-5
1.4 CURRENT COMMUNITY INVOLVEMENT ACTIVITIES .....	1-6
1.4.1 Points of Contact .....	1-6
1.4.2 Information Repositories .....	1-7
1.4.3 Administrative Record .....	1-7
1.4.4 Public Comment Periods .....	1-7
1.4.5 Public Briefings/Community Information Sessions .....	1-8
1.4.6 Restoration Advisory Board .....	1-8
1.4.7 Communication with Community Stakeholders .....	1-9
1.4.8 Fact Sheets .....	1-9
1.4.9 Mailing List.....	1-9
1.4.10 News Releases .....	1-9
1.4.11 Newsletter .....	1-10
1.4.12 Community Information Line .....	1-10
1.4.13 Website.....	1-10
1.5 ENVIRONMENTAL JUSTICE.....	1-10
<b>2.0 RESULTS OF COMMUNITY INTERVIEWS .....</b>	<b>2-1</b>
2.1 INTERVIEW POPULATION.....	2-1
2.2 INTERVIEW QUESTIONS ANALYSIS .....	2-1
2.2.1 Community Perception.....	2-2
2.2.2 Communications with the Depot about the Environmental Program .....	2-2
2.2.3 Groups or Media Sources Most Relied on for Information .....	2-2
2.2.4 Awareness of the Information Repositories.....	2-2
2.2.5 Need and Desire for Community Involvement Activities for Environmental Cleanup Program Information .....	2-3
2.2.6 Effectiveness of the Newsletter .....	2-3
2.2.7 Involvement in Public Meetings.....	2-3
2.2.8 Knowledge of the Depot's Environmental Cleanup Program.....	2-3
2.3 OTHER COMMUNITY CONCERNS .....	2-4
2.4 COMMUNITY INVOLVEMENT RECOMMENDATIONS .....	2-5
2.5 CONCLUSIONS .....	2-5
<b>3.0 COMMUNITY INVOLVEMENT STRATEGY .....</b>	<b>3-1</b>
3.1 COMMUNICATION OBJECTIVES .....	3-1

3.1.1	Community Involvement Requirements.....	3-1
3.2	GOALS OF THE COMMUNITY INVOLVEMENT STRATEGY .....	3-2
3.2.1	Goal 1: Fulfill Information Availability Requirements.....	3-3
3.2.2	Goal 2: Build Positive Interest .....	3-3
3.2.3	Goal 3: Build Community Awareness .....	3-3
3.2.4	Goal 4: Maintain Regular Information Channels .....	3-3
3.3	STRATEGIES FOR ACHIEVING OUR GOALS.....	3-4
3.3.1	Commitment .....	3-4
3.3.2	Consistent Community Outreach.....	3-4
3.3.3	Resource Support for a Community Involvement Program .....	3-4
3.4	IMPLEMENTATION OF A COMMUNITY INVOLVEMENT STRATEGY .....	3-4
3.4.1	Goal 1: Fulfill Information Availability Requirements.....	3-4
3.4.2	Goal 2: Build Positive Interest .....	3-6
3.4.3	Goal 3: Build Community Awareness.....	3-6
3.4.4	Goal 4: Maintain Regular Information Channels .....	3-7

## LIST OF APPENDICES

### APPENDIX A

Attachment 1	Environmental Cleanup Program Overview
Attachment 2	Environmental Program History
Attachment 3	The Cleanup Program
Attachment 4	CERCLA Overview

### APPENDIX B

Attachment 1	Key Contacts
Attachment 2	Information Repositories
Attachment 3	Media List
Attachment 4	Interview Questionnaire
Attachment 5	Area Schools and Churches
Attachment 6	Glossary
Attachment 7	Depot EnviroNews Newsletter and Fact Sheets – 2004

## **LIST OF ACRONYMS**

AFCEE	Air Force Center for Environmental Excellence
AMC	Army Materiel Command
AOC	Area of Concern
ATSDR	Agency for Toxic Substances and Disease Registry
BEC	BRAC Environmental Coordinator
BCP	BRAC Cleanup Plan
BCT	BRAC Cleanup Team
BRAC	Base Realignment and Closure
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CERFA	Community Environmental Response Facilitation Act
CFR	Code of Federal Regulations
CIP	Community Involvement Plan
CMi	Corrective Measures Implementation
CMS	Corrective Measures Study
COE	U.S. Army Corps of Engineers
CRP	Community Relations Plan
DA	Department of the Army
DDMT	Defense Distribution Depot Memphis, Tennessee
DERTF	Defense Environmental Response Task Force
DDC	Defense Distribution Center
DLA	Defense Logistics Agency
DoD	Department of Defense
DRC	Depot Redevelopment Corporation
EPA	United States Environmental Protection Agency
ERA	Environmental Restoration Account
FFA	Federal Facilities Agreement
FOSL	Finding of Suitability to Lease
FOST	Finding of Suitability to Transfer
FUDS	Formerly Used Defense Sites
FS	Feasibility Study
HRS	Hazard Ranking System
IR	Information Repository

**LIST OF ACRONYMS**  
*(continued)*

IRP	Installation Restoration Program
IRA	Interim Remedial Action
MLGW	Memphis Light, Gas, and Water
NEPA	National Environmental Policy Act
NCP	National Contingency Plan
NPL	National Priorities List
PA	Preliminary Assessment
PAO	Public Affairs Officer
PCB	Polychlorinated biphenyls
PCE	Tetrachloroethene
PCP	Pentachlorophenol
PRB	Permeable Reactive Barrier
RA	Remedial Action
RAB	Restoration Advisory Board
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RFI/RFA	RCRA Facilities Investigation/Assessment
RI/FS	Remedial Investigation/Feasibility Study
ROD	Record of Decision
RPM	Remedial Project Manager
SI	Site Investigation
SVE	Soil Vapor Extraction
SWMU	Solid Waste Management Units
TCE	Trichlorethene
TAG	Technical Assistance Grant Program
TAPP	Technical Assistance for Public Participation
TDEC	Tennessee Department of Environment and Conservation
TRC	Technical Review Committee
VOC	Volatile Organic Compound
ZVI	Zero-Valent Iron

## **1.0 INTRODUCTION**

This Community Involvement Plan (CIP) has been prepared to update the existing Community Relations Plan based on the progress of the environmental cleanup program at the former Defense Distribution Depot Memphis, Tennessee (DDMT). This document has been renamed CIP to reflect the language used by the Environmental Protection Agency (EPA) in its Superfund Community Involvement Handbook, April 2002.

Since 1997, the former Memphis Depot has been involved in a proactive, community-based outreach as part of an overall commitment to return the property to productive community use. The initial phase, described in the 1997 Interim Community Relations Plan (CRP), focused on identifying community concerns, implementing community outreach to rebuild trust and credibility and facilitating communication with the community regarding environmental issues.

The second phase was described in the current CRP, dated June 1999. It focused on sustaining the growing public trust and credibility while using outreach to reduce community concern throughout the environmental program. An update to the CRP was prepared in October 1999 to address remaining community concerns at a time of several high-concern cleanup activities, including the Chemical Warfare Materiel Removal program and the Remedial Investigations for the Main Installation and Dunn Field.

Since the last update to the CRP, the Remedial Investigations and Feasibility Studies have been completed for the Main Installation and for Dunn Field. The primary decision documents, the Records of Decision (RODs), have been completed. With completion of the RODs, the focus of community involvement changes from involving the community in the decision process to keeping the community informed of progress implementing the approved cleanup remedies. The purpose of this CIP is to describe the steps that will be taken to meet the goal of keeping the community informed.

The specific objectives of the CIP are to:

- Fulfill information availability requirements;
- Build positive interest in the cleanup;
- Build community awareness about community involvement opportunities; and
- Maintain regular information channels.

This update consists of three sections. Section 1 describes the purpose of the Community Involvement Plan update and provides background information about the former Memphis Depot and the surrounding neighborhoods. In

addition, there is an overview of past community involvement activities. Section 2 discusses feedback from community interviews conducted in June 2004 to identify any community concerns regarding the environmental program at the Depot, and develop the community involvement activities needed to respond to these concerns. Section 3 provides an outline for the community outreach strategy.

Prior to writing the CIP, a review of Superfund Community Involvement requirements, the Federal Facilities Agreement, and the 1999 CRP was conducted. The information from those reviews was used in developing this CIP.

## **1.1 PURPOSE OF THE COMMUNITY INVOLVEMENT PLAN UPDATE**

The purpose of the CIP update is to:

- Identify the community involvement goals;
- Present a strategy for the coming years to achieve the goals;
- Identify specific activities that can help achieve these goals;
- Ensure compliance with regulatory requirements; and
- Update the current community involvement activities to reflect the status and communication requirements of the environmental cleanup program.

## **1.2 SITE LOCATION AND DESCRIPTION**

The former Memphis Depot originated as a military facility in the early 1940s. Its initial mission and function was to provide stock control, storage, and maintenance services to the U.S. Army. The Depot received, warehoused, and distributed supplies common to all U.S. military services and some civil agencies located primarily in the southeastern United States, Puerto Rico, and Panama. Stocked items included food, clothing, electronic equipment, petroleum products, construction materials, and industrial, medical, and general supplies. Approximately four million line items were received and shipped by the Depot annually; total shipments amounted to about 107,000 tons of goods per year. In 1995, the Depot was placed on the list of the Department of Defense facilities to be closed under the Base Realignment and Closure (BRAC) process. Storage and distribution for all U.S. military services and some civil agencies continued until the facility closed in September 1997.

The Depot is in south Memphis, Shelby County, Tennessee approximately five miles east of the Mississippi River and just northeast of Interstate 240. The Depot is located four miles southeast of the central business district and one mile northwest of the Memphis International Airport. The site address is: 2163 Airways Boulevard, Memphis, Tennessee 38114.

The property consists of approximately 642 acres. The Main Installation (MI) contains approximately 578 acres with open storage areas, warehouses, and outdoor recreational areas. Dunn Field contains approximately 64 acres and includes former mineral storage and waste disposal areas. The former Memphis Depot is surrounded primarily by residential neighborhoods with a few industrial facilities and commercial properties. Some neighboring residences are located within 100 yards of the property boundary.

Following closure of a site, the U.S. Army Base Realignment and Closure Office in Ft. Monroe, Virginia is responsible for property dispositions (transfers) and is considered the owner. Four property transfers have been completed or are underway covering 422 acres. The Local Reuse Authority, known as the Depot Redevelopment Corporation (DRC), was established to plan and coordinate the reuse of the Depot. The DRC has a 50-year master lease on the Main Installation. The entire Depot site is currently zoned for Light Industrial Use. Land use controls have been established for all Depot property with residual environmental impacts above residential use criteria.

In September 1995, the Depot was approved for closure in September 1997 and was placed on President Clinton's Fast-Track Cleanup Program. As part of implementing this program, the DoD created a BRAC Cleanup Team (BCT) at all closing installations where property would be available for reuse. The goal of the BCT is to facilitate cleanup actions needed to prepare for property transfer and reuse.

The lead agency at the Depot is the Defense Logistics Agency (DLA), with oversight for the environmental cleanup program provided by the Defense Distribution Center (DDC). The regulatory agencies are the Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC). Representatives from the DDC, EPA and TDEC form the BCT and meet regularly to review and discuss the Depot's cleanup activities and progress.

### **1.2.1 Installation Restoration Program (IRP)**

The Department of Defense established the Installation Restoration Program (IRP) in 1975 to provide guidance and funding for the investigation and remediation of environmental conditions at sites caused by historical activities at military installations. At the Depot, the IRP is more commonly referred to as the environmental cleanup program.

The BRAC Environmental Coordinator (BEC) is responsible for establishing and maintaining all environmental programs, compliance programs and cleanup efforts at the Depot. TDEC and EPA provide regulatory guidance and management for the environmental cleanup program. The Depot conducts the environmental cleanup program in compliance with DLA, Department of Army (DA), DoD, local, state and federal statutes and regulations, and in

accordance with the Federal Facilities Agreement. The Federal Facilities Agreement also designates the Community Involvement Plan as a primary document that must be reviewed and approved by TDEC, EPA and DLA each time it is updated to ensure compliance with applicable federal, state and DoD community involvement requirements and guidelines.

The Depot conducts environmental compliance programs in accordance with applicable DA and DoD regulations and local, state and federal regulatory programs, including those administered under the Clean Air Act, Clean Water Act, Safe Drinking Water Act, Resource Conservation and Recovery Act (RCRA), Toxic Substances Control Act, Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), and Superfund Amendments and Reauthorization Act (SARA).

A more in-depth overview of historic environmental cleanup activities and the regulatory process can be found in Appendix A, Attachments 1, 2 and 3. More detailed information can be found in the Administrative Record (AR) online at [www.adminrec.com/dla.asp](http://www.adminrec.com/dla.asp). To learn more about CERCLA, please see Appendix A, Attachment 4.

### **1.3 COMMUNITY PROFILE**

#### **1.3.1 Community Demographics**

This demographic profile was compiled from selected demographic and housing statistics from the 2000 U.S. Census of Population and Housing. The immediate area surrounding the former Depot is composed of seven census tracts.

The Depot area has a total population of 24,946. The ethnic composition of the population of the area is 96 percent African-American. The population is not representative of the ethnic composition of Shelby County; where the percentage of African-Americans is 49.

There are 9,454 households in the Depot area. The average number of persons per household is 3.29, very close to the Shelby County average 3.18. Housing occupancy is 90%, slightly lower than the county average of 93%.

Of note is the fact that 34% of the households have one or more persons 60 years old or older. This is 10% more than the county figures. Further, owners living in their homes trail the county average by 10%. This means the area has more renters than most areas of Shelby County. The residential areas surrounding the Depot were established more than 40 years ago.

### **1.3.2 Real Estate Demographics**

The Depot is located in an area of varying uses. Formerly a residential and agricultural area, the surrounding area is characterized by small commercial and manufacturing uses north and east of the Depot and single-family residences south and west of the Depot. Numerous small churches are scattered throughout the residential neighborhoods. Several schools are located within the neighborhoods as well as two neighborhood parks.

Airways Boulevard, located on the east border of the Main Installation, is the most heavily traveled thoroughfare in the area. It is developed with numerous small, commercial establishments, particularly in the area from the Depot south to the Airways Boulevard interchange with Interstate 240. Businesses along Airways Boulevard are typical of highway commercial districts and include convenience stores, liquor stores, restaurants, used car dealers, and service stations.

Other commercial establishments are located north, south, and west of the Depot. Most are small groceries or convenience stores that serve the immediate neighborhoods. Memphis Light, Gas, and Water operates a large substation located northwest of the Depot along Person Avenue. The Burlington Northern Santa Fe Railroad and Illinois Central Railroad are north of the Depot. A number of large industrial and warehousing operations are located along the rail lines in this area, including the Kellogg Company; Lanigan Storage and Van Company; Kroger Food Store; National Manufacturing Company; and United Uniforms. A triangular area located immediately north of the Depot along Dunn Road also contains several industrial firms.

Most of the land surrounding the Depot is highly developed; however, there are still some relatively large, undeveloped sites in the general area. The largest site is located north of the Depot at Person Avenue and Kyle Street.

In Memphis, zoning controls and subdivision requirements are under the jurisdiction of the Memphis and Shelby County Office of Planning and Development. The Depot property is zoned Light Industrial. This designation extends to several nearby land parcels located east of the Depot along Airways Boulevard, in the vicinity of the Kellogg plant west past Rozelle Street. Several smaller areas, adjacent to those mentioned above, are zoned Heavy Industrial. Most of the remaining land within the vicinity of the Depot is zoned for residential use.

## **1.4 CURRENT COMMUNITY INVOLVEMENT ACTIVITIES**

The former Memphis Depot has a longstanding commitment to encouraging effective community involvement through ongoing communication and community outreach activities. Elements of the current Community Involvement Program include:

- Point of contact for community involvement and general environmental cleanup program information
- Information Repositories
- Administrative Record
- Public comment periods for all major documents
- Public meetings, public briefings and Community Information Sessions as required
- Restoration Advisory Board meetings
- Communication with Community Stakeholders (Memphis Light, Gas and Water, Memphis/Shelby County Health Department, City of Memphis, State Representatives)
- EnviroNews newsletter
- Fact Sheets
- A mailing list of individuals who receive information about the environmental cleanup program
- News Releases
- Community Information Line
- Website

### **1.4.1 Points of Contact**

The point of contact for all questions regarding the Depot's environmental cleanup program is Michael Dobbs. As the BRAC Environmental Coordinator for the Depot, Mr. Dobbs oversees the cleanup program and serves as the Facility Co-Chair of the RAB. Mr. Dobbs is the Environmental Manager for the Defense Distribution Center, which manages the environmental cleanup program on behalf of DLA.

Jackie Noble, Defense Distribution Center Public Affairs Officer, is the point of contact for all media queries and public communications concerning the cleanup of the former Depot.

The on-site Community Relations Specialist is Alma Black Moore of Frontline Corporate Communications. Ms. Moore assists the Depot's environmental team to communicate effectively with all of its community stakeholders such as neighbors, community and business groups, politicians, the media and regulators.

Due to the extensive progress in the environmental cleanup program, there is no longer a need for DDC to maintain a full time presence at the former Memphis Depot. Ms. Moore monitors the Community Information Line (901-774-3683) daily and requests for information are handled promptly.

The current list of contacts for the Depot can be found at Appendix B, Attachment 1. Information and points of contact can also be obtained from the former Memphis Depot website at [www.ddc.dla.mil/memphis](http://www.ddc.dla.mil/memphis).

#### **1.4.2 Information Repositories**

The Information Repositories (IRs) ensure that the community has access to documents prepared for the Depot's environmental cleanup program. Each IR contains: the Community Involvement Plan, Restoration Advisory Board meeting minutes, newsletters, news releases, and fact sheets related to the environmental program. The IRs also contain all final technical documents submitted to the regulatory agencies. There are currently three IRs:

- Memphis/Shelby County Public Library, Cherokee Branch
- Memphis/Shelby County Health Department, Pollution Control Division
- The Depot's Community Outreach Room

These locations will be consolidated into a single location as community usage declines. IR locations, contact numbers and hours of operation can be found in Appendix B, Attachment 2.

#### **1.4.3 Administrative Record**

The Administrative Record (AR) contains all information that forms the basis for the selection of a response action for a site, including verified sampling data, quality control and quality assurance documentation, site inspection and evaluation reports, and risk assessments. The AR also contains the Proposed Plans, as well as the Records of Decision and supporting information. For additional information, or to arrange to review the administrative record, call (901) 544-0613. The Administrative Record is also online at [www.adminrec.com/dla.asp](http://www.adminrec.com/dla.asp).

#### **1.4.4 Public Comment Periods**

A 30-day public comment period is held following completion of all key decision documents, or to explain any required changes to a key decision document. This ensures that community stakeholders can review related documents and express their opinions to the Depot on the findings. This comment period may be extended by at least 30 additional days upon timely request. Input from the public is considered by the Defense Logistics Agency, the Tennessee Department of Environment and Conservation, and the Environmental Protection Agency while making their final decisions regarding the site.

A public comment period will be held in the winter of 2004/2005 for FOST #4. Opportunities for public comment on the environmental program will also be available through RAB meetings or other public meetings. Community

participation will be encouraged by using news releases and mailings to seek input from interested community stakeholders.

The most recent public comment periods were held for the Finding of Suitability to Transfer (FOST) #3 in March/April 2004 and the Dunn Field Proposed Plan in May 2003. Public comment periods have also been completed for the Main Installation and Dunn Field Feasibility Studies and the Main Installation Proposed Plan, FOST #1 and FOST #2, and Engineering Evaluation/Cost Analysis (EE/CA) reports.

#### **1.4.5 Public Briefings/Community Information Sessions**

In addition to public comment meetings, the Depot will hold public briefings. Public briefings are required when a Remedial Design is completed to inform the community on final engineering designs. The first public briefing is scheduled in January 2004 for the Dunn Field Disposal Sites Remedial Design. A public briefing for the Main Installation Remedial Design is scheduled for Spring 2005.

The Depot may also hold Community Information Sessions to provide updates on the environmental cleanup program, including descriptions of cleanup technologies and status of cleanup activities underway. In the past, Community Information Sessions have been held in conjunction with RAB meetings. A Community Information Session has been scheduled for February 17, 2005 to update the public on Zero-Valent Iron (ZVI) injection, one of the cleanup technologies that is being used at the Depot.

#### **1.4.6 Restoration Advisory Board**

The Restoration Advisory Board (RAB) was established in 1994 to provide a forum for community involvement in environmental cleanup decisions. The RAB includes representatives from community organizations, neighborhoods and civic organizations, the Depot's BRAC Environmental Coordinator, a representative of the EPA, and a representative from the TDEC.

The RAB reviews environmental program activities and reports and addresses various environmental cleanup issues. Comments and recommendations by RAB members are made in accordance with applicable State and Federal laws and environmental regulations.

The RAB has proved an effective channel for community involvement in the Depot's environmental cleanup program. In the initial stages of the environmental cleanup program, the RAB met on a monthly basis. Now that

the program has progressed into its final stages, meetings will be held as required to update the RAB on key environmental milestones and activities. In 2004, RAB meetings were held in March and October. The current list of RAB members is found in Appendix B, Attachment 1.

#### **1.4.7 Communication with Community Stakeholders**

Throughout the cleanup process, members of the Depot's environmental team – including representatives from the community relations office, DLA and technical consultants – have communicated with and will continue to communicate with key community stakeholders to keep them updated on the progress of the cleanup program and to consult on issues related to cleanup actions that require approval from and/or notification to specific agencies. These stakeholders include Memphis Light, Gas and Water, the Memphis/Shelby County Health Department, City of Memphis, and Federal and State political representatives.

#### **1.4.8 Fact Sheets**

Fact sheets cover a wide variety of topics to help inform the community of cleanup activities, updates, and technologies. They are mailed to interested parties on the mailing list, hand-delivered door-to-door in the community, distributed during RAB meetings and other public meetings, and included in the Information Repositories and Administrative Record. Fact sheets have been updated and produced as needed.

#### **1.4.9 Mailing List**

The Depot's Community Relations Specialist maintains a mailing list of more than 5,000 homes and businesses. The list includes RAB members, local officials and other community members. This list was started in 1999 and has been updated and added to by individual requests.

#### **1.4.10 News Releases**

News releases cover timely topics to help inform the media and the community about cleanup activities. News releases are produced as needed to correspond with the completion of key cleanup milestones or reports. A Media List is provided at Appendix B, Attachment 3. Copies of past news releases are also available on the Depot's website at [www.ddc.dla.mil/memphis](http://www.ddc.dla.mil/memphis).

#### **1.4.11 Newsletter**

The Depot is committed to providing simple, clear explanations of technical data and findings, environmental risk assessment results, and cleanup technologies in articles written for the EnviroNews newsletter. Community members are encouraged to request stories on issues of specific interest.

Copies of EnviroNews are placed in the Information Repositories. Previously, EnviroNews was produced bi-monthly and then quarterly to keep pace with the cleanup activities being planned and implemented. Now, due to the advanced progress of the cleanup program, EnviroNews will be published bi-annually to provide the community with updates on the current status of the cleanup remedies.

#### **1.4.12 Community Information Line**

The Depot has established a Community Information Line that enables the public to speak with the Depot's Community Relations Specialist and provide input during public comment periods. The number is (901) 774-3683. The Depot's Community Relations Specialist monitors the line regularly and will respond directly to all calls. The Depot's Community Relations Specialist also maintains a log of all calls and responses.

#### **1.4.13 Website**

The Memphis Depot website provides an overview of the environmental cleanup program, including all contacts, RAB members, community outreach activities, back issues of EnviroNews, links to associated agencies, executive summaries of technical reports, notices of upcoming events or meetings, minutes of RAB and BCT meetings, and other opportunities for community involvement.

### **1.5 ENVIRONMENTAL JUSTICE**

Environmental Justice is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin or income, with respect to the development, implementation and enforcement of environmental laws, regulations and policies. Fair treatment means no group of people should bear a greater share of the negative environmental effects stemming from industrial, municipal, and commercial operations or the execution of federal, state, local and tribal programs and policies.

The Depot has worked hard to have meaningful stakeholder involvement that has ensured: (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; (2) the public's contribution can influence the cleanup decisions; (3) the concerns of all participants involved have been considered in the decision making process; and (4) the decision makers have sought out and facilitate the involvement of those potentially affected.

The Depot is keenly aware of the importance of environmental justice issues and will continue to ensure environmental cleanup actions and activities do not disproportionately impact any segment of the population. The Depot is committed to following the DoD guidance and policies relating to Environmental Justice, and will continue to work closely with members of the community and federal, state and local regulators to foster interactive dialogue that considers the needs, interests and concerns of those most directly impacted by cleanup activities.

## **2.0 RESULTS OF COMMUNITY INTERVIEWS**

The community interview phase of the CIP update had three goals. The first was to learn from the Depot community how best to keep them informed. The second was to gauge the effectiveness of the current CRP; and the third goal was to gain insight into the community's current concerns. Interviews with members of the Depot's communities were conducted in June 2004.

### **2.1 INTERVIEW POPULATION**

The interviewee selection process used several criteria:

- Residents from the neighborhoods surrounding the Depot;
- Representatives from community groups and civic organizations; and
- Members of the local media.

The community relations team generated a proposed list of interviewees consisting of local government representatives, RAB members, members of local community groups, news media representatives, and other interested community members. Priority was given to interviewing neighborhood residents and those who work in the area. The final interview schedule included 25 participants and an additional 10 participants were recommended by the interviewees. Ten potential participants did not make their interview appointments. Most interviews were done at a location convenient for the interviewee; however, some interviews were conducted via telephone for the interviewee's convenience. Since participants in some of the categories overlapped, it was possible to determine the range of interests and concerns in the community with 25 participants.

The majority of people interviewed were neighborhood residents who are involved in civic or community groups. Several participants are actively involved in more than one organization. Interviews were conducted one-on-one, by phone, and in small groups. Limited background information was obtained about the environmental focus of the organizations represented and the participants' levels of environmental understanding.

### **2.2 INTERVIEW QUESTIONS ANALYSIS**

Interview questions were designed to obtain feedback from interviewees on their current perception of Depot activities and to gather information about their views on the most effective community outreach activities to meet their communication needs as the environmental program progresses. (See Appendix B, Attachment 4 for interview questions).

### **2.2.1 Community Perception**

The results of the interviews indicate that people are comfortable with the environmental cleanup activities at the Depot. They expressed general concerns relative to environmental issues but no one had any specific concerns about ongoing or future cleanup activities at the Depot. This was true of participants who were very informed about the Depot's issues as well as those who had an extremely limited knowledge of the cleanup program. The general attitude was one of satisfaction with the information received and the work being done, although most were not actively participating in community involvement activities related to the cleanup program.

Participants had the highest level of awareness about the Chemical Warfare Material (CWM) cleanup program on Dunn Field that was completed in 2001. Most believe the Depot is responding to their concerns in a forthright and timely manner, and would continue to do so in the future.

Most said they were interested and sensitive to environmental issues in their community, but they did not have concerns about any specific issues at the Depot.

### **2.2.2 Communications with the Depot about the Environmental Program**

Few of the interview participants had contacted the Depot regarding environmental and/or public safety issues. Most knew Alma Black Moore, who is contracted as the Depot's Community Relations Specialist, as a point of contact for questions about the Depot's environmental program and community involvement activities. Of those who had attended meetings or spoken with a member of the environmental team about environmental concerns, their responses were split on their level of satisfaction with the response they received.

### **2.2.3 Groups or Media Sources Most Relied on for Information**

The majority of the interview participants said they rely mostly on the Commercial Appeal, the only major newspaper in town, and local television/radio stations. Many said that for they also read the Tri-State Defender, Memphis Flyer, and Silver Star News for community news.

### **2.2.4 Awareness of the Information Repositories**

The majority of interviewees were aware of the Information Repositories. However, only a few respondents had ever visited the repositories. All consider the present locations to be convenient and accessible.

### **2.2.5 Need and Desire for Community Involvement Activities for Environmental Cleanup Program Information**

Most interviewees said they would like information about the cleanup, but did not identify any specific issues or information gaps. Interviewees said they would attend a RAB meeting or public meeting if an issue came up in which they were interested. The consensus among interviewees is that the Depot cleanup program is being conducted in an open and honest fashion. They expressed confidence that there is sufficient public oversight in place.

### **2.2.6 Effectiveness of the Newsletter**

Most interviewees remembered receiving EnviroNews, the Depot's newsletter, and felt it contained the right amount of information about the cleanup program. Those who did not remember getting a newsletter have been added and/or updated on the mailing list. The Depot's Community Relations Office is currently developing a new strategy for updating and maintaining the mailing list.

### **2.2.7 Involvement in Public Meetings**

Most interviewees had attended at least one of the Depot's environmental public meetings, but few attend the meetings on a regular basis. Those who had not attended a meeting said they might attend if a meeting was held in conjunction with other activities, such as a health fair. Respondents said they would most likely attend a meeting if there was an issue that had a direct impact on their family.

The low public attendance at RAB meetings seems to reflect the lack of overall concern expressed during the interviews. Those interviewed perceive the cleanup as going well and are content not to be involved. They want the Depot to keep them informed. Two journalists from local newspapers were interviewed. Both felt satisfied with the level of information being provided and neither identified any issues or concerns with the ongoing cleanup program at the Depot.

### **2.2.8 Knowledge of the Depot's Environmental Cleanup Program**

The results of the interviews tell us that the community is only somewhat informed about environmental activities at the Depot, and that they are mildly interested in becoming more so. It is evident that while some of the community outreach tools, such as the newsletter and fact sheets, are effective in reaching the community,

awareness of the Depot's environmental program remains low. Interview participants generally view the Depot's credibility as neutral or positive on cleanup issues.

While those interviewed were aware that the Depot had an active environmental cleanup program, their overall understanding of the progress of the program is very low. The majority of the interviewees did not know the extent of the cleanup process at the Depot. This lack of knowledge may be related to their overall lack of concern about environmental issues and their expressed confidence that there is sufficient public oversight in place.

### **2.3 OTHER COMMUNITY CONCERNS**

Three concerns surfaced during the interviews. None of the concerns are directly related to the responsibilities of the Depot's environmental cleanup team.

The primary concern expressed by interviewees is that grass between the road and the Depot fence is not kept mowed, as it was when the facility was active. Interviewees said the area appears abandoned when the grass is not cut, and this reflects poorly on the neighborhood. The Depot Redevelopment Corporation (DRC), the agency responsible for maintaining the Depot property, was informed of the community concerns regarding mowing and general property upkeep.

The second concern originates with the Public Health Assessment conducted by the Agency for Toxic Substances and Disease Registry (ATSDR). While public comments were requested after the study was released, none of the interviewees remember seeing ATSDR's response to the public comments or a final report being published or presented in a public meeting. The interviewees expressed concerns about the length of the study (it only covered five years), the method of collecting information, and the lack of response from ATSDR to their questions at public comment meetings. These concerns about the ATSDR Health Assessment were passed on to the appropriate ATSDR staff members prior to the October 21, 2004 RAB meeting.

The third concern was about the reuse of the Depot land. Interviewees said that the community wants the Depot to be an economic generator again, but not at the expense of the environment or public health. They were glad to see the police substation at the Depot and would like to see more community services located on the site, such as a health clinic or a technical school.

## **2.4 COMMUNITY INVOLVEMENT RECOMMENDATIONS**

There was not a consensus from interviewees on how the Depot can best reach the community with information about the environmental cleanup program. While most were aware that a cleanup program is underway and said they were happy with the amount of information they were receiving, specific knowledge about the program was generally low. Some participants attributed this to the technical nature of the information and presentations.

Most interviewees felt that public meetings would be better attended if they were held in conjunction with a health fair. The consensus was that an event that spanned the afternoon and early evening would be best. They also recommended continuing the newsletter to provide the community with ongoing information.

Interviewees said information sent by mail was the best method for notification and for encouraging involvement in the Depot activities. Several commented that interest in the Depot's environmental program would likely not increase unless the situation warranted concern.

## **2.5 CONCLUSIONS**

Some members of the public expressed continuing concerns about the possible health effects of past operations and environmental conditions at the Depot, due in part to what they perceive as a lack of effective response from ATSDR.

While the public's awareness of the environmental cleanup progress taking place at Depot is low, interviewees expressed satisfaction with their current level of knowledge about the cleanup program. They are satisfied that there is sufficient public oversight of the environmental cleanup program in place and that the Depot cleanup program is being conducted in an open and honest fashion.

The most effective sources of information about the cleanup program have been the newsletter and the media. Interviewees also suggested combining other community activities with Depot public meetings in order to increase attendance.

Several participants living near the Depot said they have not received mailings. The mailing list will be reviewed and updated to address this concern. While the grass cutting issue and concerns about the ATSDR Public Health Assessment do not fall within the Depot's jurisdiction, Community Relations staff and DDC staff responsible for

overseeing the site will continue to forward these concerns to the appropriate agencies. The following section reflects suggested community involvement activities based on the community interviews.

### **3.0 COMMUNITY INVOLVEMENT STRATEGY**

#### **3.1 COMMUNICATION OBJECTIVES**

It is vital that the Depot's environmental team clearly communicates that: federal and state regulatory agencies have approved cleanup solutions for the Depot; that work to install final cleanup remedies has started; that the Depot distributes timely information about the progress of the cleanup; and, that the Defense Distribution Center will ensure completion of the cleanup.

Different community outreach activities suitable for providing information in these areas are outlined below.

##### **3.1.1 Community Involvement Requirements**

The Depot meets all of the EPA's regulatory requirements and DoD guidance for public involvement in cleanup programs. The EPA community involvement regulations are summarized in the National Contingency Plan and the Superfund Community Involvement Handbook. Below is a summary of the community involvement activities that will be conducted in the future to meet the community involvement activities required in the current stage of the Depot's cleanup program:

##### Remedial Design (RD) and Remedial Action (RA)

- A fact sheet will be prepared that describes the Final Engineering Design of the approved cleanup remedies for each site.
- A public briefing will be held to describe the Final Engineering Design for the approved cleanup remedies for each site.
- The Final Engineering Design for the approved cleanup remedies will be placed in the Depot's Information Repositories.

##### Operation and maintenance of the cleanup remedies

- The community and other potentially interested parties will be notified when a Five-Year Review of each remedy will be conducted.
- Residents will be consulted.
- The Five-Year Review and a summary of public comments will be placed in the Information Repositories.
- An ad will be placed in local media to announce the completion of a Five-Year Review and the availability of the report and a summary for public review.

#### Deletion from the National Priorities List (NPL)

- When cleanup objectives at the Depot have been met, the environmental team will begin the site deletion process from the NPL.
- A Notice of Intent to Delete will be published in the Federal Register and in local newspapers.
- A 30-day Public Comment Period will be held and a Responsive Summary completed and placed in the Information Repositories and the final report.
- A report detailing how cleanup objectives have been met to ensure the site is protective of human health will be placed in the Information Repositories.
- With EPA and TDEC's approval, a Notice of Final Deletion will be placed in the Federal Register.

#### Post-ROD Significant Changes

If the environmental team needed to significantly change a cleanup remedy during the design and implementation phases of the cleanup program with respect to scope, performance, or cost, the Depot would inform the public through the following initiatives:

- A notice that summarizes an Explanation of Significant Difference (ESD) would be placed in local newspapers.
- Information about the ESD would be placed in the Information Repositories and Administrative Record.
- A notice of a proposed amendment to a ROD would be placed in local newspapers
- A 30-day public comment period would be held.
- A public comment meeting would be held and a Responsiveness Summary completed and placed in the Information Repositories and the final report.
- A notice of the availability of the amended ROD would be placed in local newspapers
- The amended ROD would be placed in the Information Repositories and Administrative Record.

### **3.2 GOALS OF THE COMMUNITY INVOLVEMENT STRATEGY**

Planning an effective community involvement strategy requires the identification of specific goals and a commitment to the activities that will help achieve those goals. The goals identified below reflect the EPA's regulatory requirements and DoD guidance for public involvement in cleanup programs, the successes of the Depot's past community involvement activities, and those strategies identified by participants in the 2004 community interviews conducted to develop this CIP update.

- Fulfill information availability requirements;
- Build positive interest in the cleanup program;
- Build community awareness about community involvement opportunities; and
- Maintain regular information channels.

### **3.2.1 Goal 1: Fulfill Information Availability Requirements**

This Community Involvement Plan fulfills one of those requirements. Other requirements include provision of a public Information Repository (IR) and maintenance of an Administrative Record (AR) that supports decisions made at the site. All major documents related to the cleanup program that have been completed to date have been placed in the IRs and submitted for inclusion in the AR. Information will continue to be made available throughout the completion of the cleanup program.

### **3.2.2 Goal 2: Build Positive Interest**

Of the 25 people interviewed, the majority viewed the Depot's environmental cleanup program as effective and credible. A second goal of the CIP is to maintain the community's trust and credibility through effective community outreach strategies, even as active opportunities for community involvement decrease during the later stages of the cleanup program.

### **3.2.3 Goal 3: Build Community Awareness**

The Depot's environmental program reflects many years of hard work, dedication, and commitment by both the Depot and the community. Although the program is now entering the final stages of the CERCLA process, many residents in the community are not aware of how much has already been accomplished. A third goal of the Depot's Community Involvement Plan is to ensure residents are aware that, once final cleanup remedies are installed and operational, the Depot will continue to provide updates to the community as new information becomes available.

### **3.2.4 Goal 4: Maintain Regular Information Channels**

The open flow of information between the Depot and the community will continue as the cleanup process enters its final stages. Regular information channels, such as the newsletter, fact sheets and Public Briefings, will continue in order to maintain the trust and credibility the Depot has built with the community.

### **3.3 STRATEGIES FOR ACHIEVING OUR GOALS**

#### **3.3.1 Commitment**

The Defense Logistics Agency fully supports the Community Involvement Plan for the environmental cleanup program at the Depot and has assigned the Defense Distribution Center to manage the program. Michael Dobbs, DDC Environmental Manager, is the Depot's BRAC Environmental Coordinator and is committed to maintaining an open channel of communication with the community throughout the completion of the program.

#### **3.3.2 Consistent Community Outreach**

Consistent community outreach demonstrates to the public that the Depot is committed to an open process of communication. This facilitates a dialogue with the community that will continue as the cleanup program progresses. In addition to the communication activities required by regulation, the Depot can implement additional outreach activities to ensure the community stays informed and involved.

#### **3.3.3 Resource Support for a Community Involvement Program**

The DDC has taken steps to ensure adequate resources are available throughout the cleanup program to maintain consistent communication and outreach with the community. The Depot's environmental team will continue to incorporate community involvement activities into the environmental program. The CIP update will ensure these activities address specific community information needs.

### **3.4 IMPLEMENTATION OF A COMMUNITY INVOLVEMENT STRATEGY**

The community involvement activities that are part of this Community Involvement Plan update are described below. These activities will assist the environmental team to achieve its community involvement goals.

#### **3.4.1 Goal 1: Fulfill Information Availability Requirements**

Specific actions that will be taken include maintaining an updated Information Repository, working with the local media, providing executive summaries of environmental reports, and holding regular public meetings.

#### **3.4.1.1 Maintain an Updated Information Repository and Administrative Record**

Information Repositories are currently located at the Memphis/Shelby County Public Library, Cherokee Branch; Memphis/Shelby County Health Department; and the Depot's Community Outreach Room. (Appendix B, Attachment 2.) These locations will be consolidated into a single location as community usage declines. New documentation and reports related to the environmental cleanup program will be placed in an IR and AR in a timely manner.

#### **3.4.1.2 Working with the Media**

Local media outlets help the Depot to convey information to the community. This action entails drafting and distributing news releases and public service announcements. The initiation or conclusion of environmental activities, as well as decisions that are made, are announced in news releases that are sent to the appropriate media outlets. In addition to progress on the environmental program, the media is notified of and invited to newsworthy events such as site tours, public meetings, and community presentations.

##### **3.4.1.2.1 Public Service Announcements**

Public Service Announcements (PSAs) of upcoming public outreach events are sent to the appropriate local media outlets. Frequently, the local radio stations, newspapers, and cable television networks will publicize public events and meetings at no cost. The Depot uses PSAs to the maximum extent possible to notify the public of events.

##### **3.4.1.2.2 Paid Advertising**

CERCLA requires that a public notice be placed in a newspaper of general circulation to notify the community of public involvement opportunities in the environmental cleanup program. Ads will be placed in the future when Five-Year Reviews begin, the public comment period for FOST #4 begins, or if significant changes are required to decision documents such as a Record of Decision. The Depot also uses paid advertising to advertise RAB meetings or general information meetings that include public briefings required for final engineering designs prior to beginning remedial actions.

### **3.4.1.3 Executive Summaries of All Environmental Reports**

The reports generated during the cleanup program tend to be highly technical. Executive summaries will provide community members and the media with a concise summary of the report and will ensure the community is kept informed of progress at the site.

### **3.4.2 Goal 2: Build Positive Interest**

Specific tools that will be implemented to address Goal 2 include: producing the EnviroNews newsletter twice a year; producing fact sheets as required; and maintaining the website and community information line. The Depot will also have public meetings as required to meet CERCLA requirements and meet with community stakeholders to provide information about and consult on issues related to the cleanup program. Another option under consideration is an annual Community Information Session to keep the community updated about the progress of the cleanup program throughout its completion.

In the past, the Depot's environmental team has created a tabletop exhibit or Poster Stations about the environmental program that has been used at Community Information Sessions. These tools can be updated, using materials already developed to provide information about the progress of the cleanup program.

### **3.4.3 Goal 3: Build Community Awareness**

Building community awareness about the changes they will see in the frequency and types of community outreach activities and involvement opportunities as the environmental program progresses can be done through regular and consistent communications. Fact sheets and newsletters are key elements of this goal. In addition, reaching out to the media through news releases and backgrounders will assist with this goal.

#### **3.4.3.1 Produce Fact Sheets**

Fact sheets have proved to be an effective tool for delivering information to the public about environmental activities. Future fact sheets will be produced to describe each of the final cleanup technologies and remedies approved for the Depot. Fact sheets will also be produced for the final engineering design for the cleanup remedies. Fact sheets may also be produced to update the community about the progress of cleanup activities.

#### **3.4.4 Goal 4: Maintain Regular Information Channels**

The current mailing list will be updated to ensure that newsletters, fact sheets and other communications from the Depot reach their intended audiences. In addition, the Depot will continue its practice of providing the community with information about the local, state and federal agencies and resources available to address questions or concerns they may have about non-restoration issues, such as health, drinking water quality, former employees, future employment opportunities, property standards, and land-use policies.

##### **3.4.4.1 The RAB**

The RAB and its members have helped to ensure ongoing community involvement in the Depot's environmental cleanup program. The goals of the RAB are to improve communications among stakeholders, promote public participation in the cleanup process, and solicit input to be used in the decision process. The RAB has accomplished these goals effectively, and all of the key decision documents have now been completed and final remedies are being implemented.

The DoD's guidance on RABs states that a RAB may wish to adjourn or become inactive under any of the following circumstances:

- All key decision documents have been completed;
- There is no longer sufficient or sustained community interest in cleanup activities;
- All final cleanup remedies are in place and operating.

Adopting an inactive or standby status will allow a RAB to be recalled for future public involvement opportunities such as annual environmental program updates or public briefings. The RAB would also be recalled in the event that any significant changes needed to be made to key decision documents, such as a ROD, in order to meet cleanup objectives. At sites where RABs have adjourned or adopted an inactive status, the community is kept informed of the progress of the cleanup program through other communication channels such as newsletters, fact sheets, news releases and public meetings.

The Depot's environmental team will seek input from RAB members and the community regarding the status of the Depot's RAB. No action will be taken to adjourn the RAB without full public consultation.

#### **3.4.4.2 Annual Public Meetings**

In the past, the Depot's environmental team has hosted Community Information Sessions to keep the community informed of and involved in the cleanup program. A Community Information Session has been scheduled for February 17, 2005 to update the public on ZVI injection, one of the cleanup technologies that is being used at the Depot. The Depot will hold additional Community Information Sessions as needed to keep the community informed throughout the completion of the cleanup program.

Public meetings will be announced in general circulation newspapers. To promote attendance, a Community Information Session could include an Information Fair with representation by city and county health officials, or information sessions for Middle and Senior High School science classes.

Public briefings will be held to update the community on the final engineering designs of the cleanup remedies for both the Main Installation and Dunn Field. A public briefing for the Dunn Field Disposal Sites Remedial Design has been scheduled for January 20, 2005. A public briefing for the Main Installation Remedial Design is scheduled in the spring of 2005.

#### **3.4.4.3 Mailings**

The current mailing list was developed using a property owners list and names have been added to it or updated at the request of interested stakeholders and community members. This list will be updated to ensure those who are interested in the cleanup program at the Depot receive information in a timely manner.

## **APPENDIX A**

### **Attachment 1: Environmental Cleanup Program Overview**

The environmental cleanup program at the Memphis Depot reached a major milestone in April 2004 as the Defense Logistics Agency (DLA), Defense Distribution Center (DDC), Environmental Protection Agency (EPA), and Tennessee Department of Environment and Conservation (TDEC) signed the Dunn Field Record of Decision (ROD). The cleanup actions selected in the Dunn Field ROD coupled with cleanup actions selected in the Main Installation ROD, signed by all three agencies in September 2001, moves the Memphis Depot fully into the Remedial Action phase of the cleanup process.

Activated in 1941 as a supply depot, the U.S. Army operated the Memphis Depot until 1963 when DLA took over and operated the facility until it closed in September 1997. The Memphis Depot received, warehoused, and distributed supplies common to all U.S. military services and some civil agencies. Stocked items included food, clothing, petroleum products, construction materials, and industrial, medical, and general supplies. The Memphis Depot covers 642 acres and consists of two areas – the Main Installation, 574 acres, and Dunn Field, 68 acres.

Activities conducted at the Main Installation include pesticide storage and application, vehicle and equipment maintenance, and hazardous material storage and handling. Dunn Field was primarily used to store bauxite and fluorspar for the Defense National Stockpile Center. Disposal activities at Dunn Field began in 1946, with the decontamination and burial of 29 mustard-filled German bomb casings, and continued periodically until the late 1960s.

An environmental restoration program has been in place at the Memphis Depot since the 1981 Installation Assessment. Since then the Memphis Depot has completed several additional environmental investigations including the Remedial Investigation (RI) performed by Law Environmental in 1989 and 1990. In 1992, EPA placed the Memphis Depot on the National Priorities List for environmental cleanup. In 1995, DLA entered into a Federal Facilities Agreement with EPA and TDEC that outlined the environmental cleanup process for the Memphis Depot. Also in 1995, the Memphis Depot was placed on the list of Department of Defense (DoD) facilities to be closed under Base Realignment and Closure (BRAC).

Remedial Investigation fieldwork began in 1998 to more completely define the extent of the affected groundwater. The Memphis Depot completed the Main Installation RI and Feasibility Studies (FS) for Soil and Groundwater in 2000, the Dunn Field RI in 2002 and the Dunn Field FS in 2003. These investigations found that groundwater in the

uppermost aquifer beneath the Main Installation and Dunn Field contains levels of volatile organic compounds (VOCs) that requires cleanup. These VOCs have not reached groundwater in the deeper aquifer, the Memphis Sand, used by the City of Memphis for drinking water supply.

In 1996 DLA, EPA and TDEC signed a ROD for an Interim Remedial Action to prevent VOCs in groundwater from moving off Dunn Field. A groundwater extraction system consisting of seven recovery wells began operations in November 1998. Four additional recovery wells were installed in late 1999 and early 2000. The system has been in continuous operation since then, removing more than 550 pounds of VOCs through August 2004. According to the Five-Year Review for Dunn Field, the groundwater capture zones between some recovery wells are not completely connected, allowing groundwater containing VOCs to flow off Dunn Field. The Dunn Field ROD specifies actions to treat VOCs in groundwater on and off Dunn Field. The ROD specifies discontinuing the groundwater extraction system once the selected groundwater cleanup remedies have been completed.

The Memphis Depot completed several removal actions between 1985 and 2001 excavating soil that contained unacceptable levels of pentachlorophenol (PCP), pesticides, polychlorinated biphenyls (PCBs), and lead at the Main Installation and Dunn Field. One area was subsequently transferred for use as housing for homeless veterans. The Army completed a removal action excavating Chemical Warfare Materiel (CWM) at Dunn Field in May 2001.

The MI ROD, executed on September 6, 2001, specifies enhanced bioremediation and monitored natural attenuation of VOCs in groundwater and land use controls prohibiting reuse for residential or daycare purposes, prohibiting installation of drinking water wells and maintenance of the fence around the golf course. The Memphis Depot completed a treatability study for enhanced bioremediation of VOCs in groundwater in 2004 and plans to begin construction of the enhanced bioremediation injection system in 2005.

The final Dunn Field ROD, executed on April 12, 2004, specifies excavation and off-site disposal at several specific disposal sites; soil vapor extraction to remove VOCs from subsurface soils, injection of Zero-Valent Iron (ZVI) within the uppermost aquifer beneath Dunn Field to treat chlorinated VOCs; installation of a Permeable Reactive Barrier (PRB) to treat chlorinated VOCs within the off-site areas of the groundwater plume; monitored natural attenuation and long-term groundwater monitoring; and land use controls on the western portion of Dunn Field prohibiting reuse for residential or daycare purposes, and restricting installation of drinking water wells. The Memphis Depot plans to begin remedial actions at Dunn Field in 2004.

## Attachment 2: Environmental Program History

### Documents

Since 1981, various environmental studies and actions have been initiated at the Memphis Depot to identify and characterize the nature and extent of contamination and to communicate these activities to regulatory agencies and the public. These activities were documented in the following plans, reports and other documents:

DOCUMENT	Year	Author
Installation Assessment of Defense Depot Memphis, Tennessee Report No. 191	1981	U.S. Army Toxic and Hazardous Materials Agency
Geohydrologic Study No. 38-26-0195-83	1982	U.S. Army Environmental Hygiene Agency
Environmental Audit No. 43-21-1387-86	1985	U.S. Army Environmental Hygiene Agency
Water Quality Biological Study No. 32-0733-86, Investigation of Fire Reservoir	1986	U.S. Army Environmental Hygiene Agency
Ground Water Consultation No. 38-26-0815-87, Collection and Analysis of Ground Water Samples	1986	U.S. Army Environmental Hygiene Agency
Summary Report, On-Site Remedial Activities at the Defense Depot Memphis	1986	O.H. Materials Company
Remedial Investigation Final Report	1990	Law Environmental, Inc.
Remedial Investigation Final Report Appendices	1990	Law Environmental, Inc.
Feasibility Study Final Report	1990	Law Environmental, Inc.
RCRA Facility Assessment	1990	Environmental Protection Agency and A.T. Kearney
Pumping Test Technical Memorandum	1992	Engineering-Science, Inc.
Final Focused Feasibility Study: Dunn Field	1994	Engineering-Science, Inc.
Electromagnetic and Magnetic Surveys at Dunn Field, Defense Depot Memphis, Tennessee	1994	U.S. Army Corps of Engineers Waterways Experiment Station
Groundwater Monitoring Results Report for Defense Depot Memphis, Tennessee, Volumes 1 through 9	1994	Environmental Science & Engineering Inc.
High Resolution Seismic Reflection Survey to Image the Top and Bottom of a Shallow Clay Layer at the Memphis Defense Depot, Memphis, Tennessee	1994	Kansas Geological Survey
Ordnance and Explosive Waste Chemical Warfare Materials, Archives Search Report for Memphis Defense Depot	1995	U. S. Army Corps of Engineers - St. Louis
Sediment Sampling Analysis Report	1996	U.S. Army Space and Strategic Defense Command
Record of Decision for Interim Remedial Action of the Groundwater at Dunn Field (OU-1) at the Defense Distribution Depot Memphis, Tennessee	1996	U.S. Army Corps of Engineers and CH2M Hill
Environmental Baseline Survey	1996	Woodward-Clyde, Inc.

DOCUMENT	Year	Author
Groundwater Characterization Data Report	1998	U.S. Army Corps of Engineers and CH2M Hill
Revised Final BRAC Parcel Summary Reports	1998	U.S. Army Corps of Engineers and CH2M Hill
Final Remedial Investigation Sites Letter Reports	1998	U.S. Army Corps of Engineers and CH2M Hill
Final Screening Sites Letter Reports	1998	U.S. Army Corps of Engineers and CH2M Hill
Final Background Sampling Program Report	1998	U.S. Army Corps of Engineers and CH2M Hill
Post Removal Report, Family Housing Area, Memphis Depot, Tennessee, Volumes I and II	1999	U.S. Army Corps of Engineers Mobile and OHM Remediation Services, Corp.
Post Removal Report, Cafeteria Building, Memphis Depot, Tennessee	1999	U.S. Army Corps of Engineers Mobile and OHM Remediation Services, Corp.
Final Engineering Evaluation and Cost Analysis (EE/CA), Old Paint Shop and Maintenance Area, Parcels 35 and 28	1999	U.S. Army Engineering Support Center Huntsville and CH2M Hill
Final Engineering Evaluation and Cost Analysis (EE/CA) for the Removal of Chemical Warfare Materiel, Former Defense Distribution Depot Memphis, Tennessee	1999	U.S. Army Corps of Engineers Mobile and Parsons Environmental Science, Inc.
Project Closure Report, Parcels 28/35, Old Paint Shop and Maintenance Area	2000	U.S. Army Corps of Engineers, Mobile District and Jacobs/Sverdrup Inc.
Main Installation Remedial Investigation Report	2000	U.S. Army Engineering and Support Center Huntsville and CH2M Hill
Main Installation Feasibility Studies for Groundwater and Soil	2000	U.S. Army Engineering and Support Center Huntsville and CH2M Hill
Main Installation Proposed Plan	2000	U.S. Army Engineering and Support Center Huntsville and CH2M Hill
Decontaminate and Closure of Permitted Container Storage Facility (Building 308) and Removal of Lead Impacted Soil at Building 949	2001	U.S. Army Corps of Engineers South Atlantic Division, Mobile, and Jacobs Engineering Services
Decontamination Report and Certification for Closure of Permitted Container Storage Facility (Building T-308)	2001	U.S. Army Corps of Engineers South Atlantic Division, Mobile, and Jacobs Engineering Services
Final Report Chemical Warfare Materiel Investigation and Removal Action at Defense Depot Dunn Field	2001	U.S. Army Engineering and Support Center Huntsville, AL, and UXB International
Main Installation Record of Decision	2001	U.S. Army Engineering and Support Center Huntsville and CH2M Hill
Revision 2 Dunn Field Remedial Investigation Report	2002	U.S. Army Engineering and Support Center Huntsville, AL, and CH2M Hill
Revision 2 Main Installation Remedial Design Work Plan	2002	U.S. Army Engineering and Support Center Huntsville, AL, and CH2M Hill
Dunn Field Site 60 Engineering Evaluation/Cost Assessment	2002	U.S. Army Engineering and Support Center Huntsville, AL, and CH2M Hill
Dunn Field Site 60 Action Memorandum	2002	U.S. Army Engineering and Support Center Huntsville, AL, and CH2M Hill

<b>DOCUMENT</b>	<b>Year</b>	<b>Author</b>
Dunn Field Site 60 Remediation Report	2003	U.S. Army Corps of Engineers, Mobile, AL, and Jacobs Engineering Group
Revision 2 Dunn Field Feasibility Study	2003	U.S. Army Engineering and Support Center Huntsville, AL, and CH2M Hill
Dunn Field Proposed Plan	2003	U.S. Army Engineering and Support Center Huntsville and CH2M Hill
Dunn Field Record of Decision	2004	U.S. Army Engineering and Support Center Huntsville and CH2M Hill
Main Installation Remedial Design for Groundwater	2004	U.S. Army Engineering and Support Center Huntsville, AL, and CH2M Hill
Dunn Field Disposal Sites Remedial Design	2004	U.S. Army Engineering and Support Center Huntsville, AL, and CH2M Hill

### **Attachment 3: The Cleanup Program**

An environmental restoration program has been in place at the Memphis Depot since 1981. Since then the Memphis Depot environmental team has completed a number of important steps in the ongoing environmental cleanup process. These achievements have allowed the environmental team, the Depot Redevelopment Corporation (DRC), and the community to move closer towards the long-term goal of restoring the Memphis Depot property and returning it to the City of Memphis for productive reuse. An overview of some of the major milestones in the program and associated compliance programs for the Memphis Depot is provided below.

- In 1985, the Memphis Depot completed a removal action at the pentachlorophenol (PCP) dip vat to address soil containing unacceptable levels of PCP, as well as an underground storage tank and the associated piping.
- In 1990, EPA Region 4 conducted a Resource Conservation and Recovery Act (RCRA) Facility Assessment (RFA) at the Memphis Depot that resulted in identification of 49 solid waste management units (SWMUs) and eight areas of concern (AOCs) at the facility.
- On September 28, 1990, EPA Region 4 and TDEC issued the Memphis Depot a RCRA Part B permit for the storage of hazardous waste (No. TN4 210-020-570) that included requirements for the identification and, if necessary, corrective action of SWMUs and AOCs. Subsequent to issuing the permit, EPA prepared a final Hazard Ranking System (HRS) Scoring Package for the facility.
- On October 14, 1992, based on the final HRS score of 58.06, EPA added the Memphis Depot to the National Priorities List (NPL) (57 Federal Register 47180 No. 199).
- On March 6, 1995, EPA, TDEC and DLA entered into a Federal Facilities Agreement (FFA). Appendix C of the FFA (FY94 Site Management Plan) identified a list of the original sites for investigation. A BRAC Cleanup Plan (BCP) subsequently replaced the SMP and included the list of sites for further investigation under CERCLA. The FFA outlined the process for investigation and cleanup of the sites at the Depot under CERCLA.
- In July 1995, the Depot was identified for closure under the BRAC process, which requires environmental restoration at the Depot to comply with requirements for property transfer under Public Law 101-510 of Title XXIX, Defense Base Closure and Realignment. After the Depot was placed on the BRAC closure list, the City of Memphis and County of Shelby established the Memphis Depot Redevelopment Agency, now the Depot Redevelopment Corporation (DRC), to plan and coordinate the reuse of the Depot.
- In 1995, the Memphis Depot completed Generic Remedial Investigation/Feasibility Study Work Plans, which were approved by EPA and TDEC.
- In 1996, EPA approved a Record of Decision (ROD) for an Interim Remedial Action (IRA) for Groundwater at Dunn Field.
- In 1997, sampling of RI, screening and BRAC sites occurred on the MI. The BCT began reviewing this sampling data and changed the environmental condition of property categories for subparcels, as appropriate.

- In 1998, the Memphis Depot completed construction of the first phase of the groundwater IRA and the system became operational. The Army completed soil and groundwater sampling for chemical warfare materiel (CWM) at Dunn Field. The Memphis Depot also completed a removal action of dieldrin soil at the former military family housing area.
- In 1999, action memorandums were prepared, presented to the RAB, and signed for removal actions at the old paint shop and maintenance area as well as for CWM disposal locations at Dunn Field. Additional monitoring wells were installed west of Dunn Field to provide more information on the hydrogeology of the area. Additional recovery wells for the groundwater IRA were approved by the BCT and installed by the end of 1999. The Memphis Depot also completed RI fieldwork at the MI and started fieldwork for Dunn Field.
- In 2000, the Memphis Depot completed the removal action at the old paint shop and maintenance area and began the removal action for CWM disposal locations at Dunn Field. The Memphis Depot also completed and provided to the public the MI RI Report, FSs for Soil and Groundwater, and MI Proposed Plan. The BCT approved a sampling plan addendum for groundwater at Dunn Field that called for additional monitoring wells and soil borings to provide more information on the hydrogeology of the area and the extent of the contaminant plume.
- In 2001, the Memphis Depot completed the CWM removal action and RI field work at Dunn Field. The Memphis Depot also completed the additional groundwater sampling at Dunn Field. The BCT began its review of the Dunn Field RI Report to be finalized in 2002. The Memphis Depot prepared and received DLA, EPA and TDEC signature on the MI ROD. The Memphis Depot completed a removal action at the south end of Building 949, subsequent to completion of the MI ROD. The Memphis Depot began preparing the MI remedial design for groundwater.
- In 2002, the BCT completed its review of the Dunn Field RI Report. The Memphis Depot began the enhanced bioremediation treatability study at the MI for use in the MI RD for groundwater. The Memphis Depot also completed a removal action for lead in soil at the former pistol range on Dunn Field.
- In 2003, the BCT completed its review of the Dunn Field FS. The Memphis Depot provided the Dunn Field RI Report and FS to the public and completed the public comment period for the Dunn Field Proposed Plan.
- In 2004, DLA, EPA and TDEC signed the ROD for Dunn Field. The BCT reviewed data gathered during MI groundwater RD activities and refined conceptual site models of the area geology. The BCT continued reviewing remedial designs for Dunn Field disposal sites and for the selected groundwater remedies – soil vapor extraction (SVE), permeable reactive barriers (PRB), and zero-valent iron (ZVI) injection.

Information regarding these cleanup activities is available in the Depot's Information Repositories. Cleanup activities are also routinely discussed at the Restoration Advisory Board meetings.

Information about community involvement activities associated with the cleanup activities is available on the Depot's website at <http://www.ddc.dla.mil/memphis/comm-inv.asp>.

#### **Attachment 4: CERCLA Overview**

The Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) was passed by Congress in 1980, and was amended by the Superfund Amendments and Reauthorization Act in 1986. It was designed to clean up closed or abandoned hazardous waste sites, and to fund these activities by collecting from "potentially responsible parties." CERCLA is codified in 42 USC 9601-9675. Executive Order 12580 (52 F.R. 2923, 29 January 1987) delegated responsibility and authority for cleanups at military installations to the Secretary of Defense.

The Department of Defense (DoD) is the lead agency for CERCLA cleanups involving environmental releases at facilities under DoD jurisdiction, custody, or control. Besides being the lead agency for the cleanup, DoD was also delegated responsibility for public notice and public participation requirements, as well as cleanup standards. The process is very detailed, and the complete process can take years before remediation of a site begins. The process is described in the National Contingency Plan (NCP).

#### **Preliminary Assessment**

As a screening process, the Environmental Protection Agency (EPA) will perform a Preliminary Assessment (PA) of a site (often a review of data without an actual site visit) to determine if further study is necessary.

#### **Site Inspection**

A Site Inspection is an on-site investigation to find out whether there is a release or potential release and to determine the nature of the associated threats. The purpose is to augment the data collected in the PA and to generate, if necessary, sampling and other field data to determine if further action or investigation is necessary. If deemed necessary, the site is scored using the Hazard Ranking System. Any site which receives a score of 28.50 or above on the Hazard Ranking System will be included on the National Priorities List (NPL).

#### **Remedial Investigation**

A Remedial Investigation (RI) is a process undertaken by the lead agency to determine the nature and extent of the problem presented by the release. The RI emphasizes data collection and site characterization and is generally performed concurrently and in an interactive fashion with the feasibility study (FS). The RI includes sampling and

monitoring, as necessary, and the gathering of sufficient information to determine the necessity for remedial action and to support the evaluation of remedial alternatives.

### **Feasibility Study**

A Feasibility Study (FS) is undertaken by the lead agency to develop and evaluate options for remedial action. The FS emphasizes data analysis, using data gathered during the RI. The RI data is used to define the objectives of the response action, to develop remedial alternatives, and to undertake an initial screening and detailed analysis of the alternatives. The remedial investigation and feasibility study are collectively referred to as the RI/FS.

### **Proposed Plan**

The Proposed Plan outlines the nature and extent of contamination at the site, the alternatives evaluated, and the preferred approach to remediation. This activity is a key point in the CERCLA process for formal input from the general public.

### **Record of Decision**

Once the RI/FS is completed, the EPA oversees the selection of the appropriate cleanup option, following principles set forth in the CERCLA Cleanup Standards and the revised NCP. This selection is described in a public document called a Record of Decision.

### **Remedial Design**

The Remedial Design (RD) is the technical analysis and procedures that follow the selection of a remedy for a site and results in a detailed set of plans and specifications for implementation of the remedial action.

### **Remedial Action**

The Remedial Action (RA) follows the remedial design and involves the actual construction or implementation of a cleanup.

## APPENDIX B

### Attachment 1: Key Contacts

**The Memphis Depot  
RESTORATION ADVISORY BOARD  
MEMBERSHIP  
(Updated September 29, 2004)**

**Community Co-Chair  
Mr. Mondell Williams**

667 Mallory Ave.  
Memphis, TN 38106  
Home: (901) 946-9751

**Facility Co-Chair  
Mr. Mike Dobbs**

DDC Environmental Manager  
The Memphis Depot  
2163 Airways Blvd.,  
Building 144,  
Memphis TN 38114 - 5210  
Ph: (717) 770-6950  
[michael.dobbs@dla.mil](mailto:michael.dobbs@dla.mil)

**Community Members**

**Mr. Dave Bond**  
2410 Bridgeport Drive  
Memphis, TN 38114  
Home: (901) 774-4903

**Ms. Doris Bradshaw**  
1458 E. Mallory  
Memphis, TN 38106  
Home: (901) 942-0329  
Fax: (901) 942-0800  
E-mail: DDMTCCC411@aol.com

**Mr. Eugene Brayon**  
2447 Rozelle St.  
Memphis, TN 38114-5733  
Home: (901) 775-0730

**Ms. Peggy Brooks**  
1924 Hays Road  
Memphis, TN 38114  
Home: (901) 743-5136 or 949-7948  
Work: (901) 775-7874 Ext. 239  
E-mail: brooksp@belllsouth.net

**Atty. Reginald Eskridge**  
100 North Main Street, Suite 1036  
Memphis, TN 38103-5010  
work: (901) 522-9600  
Fax: (901) 276-3800

**Ms. Johnnie Mae Peters**  
3286 Norton Road  
Memphis, TN 38109  
Home: (901) 785-7289

**Mr. Ulysses Truitt**  
2559 Bridgeport Drive  
Memphis, TN 38114  
Home: (901) 947-2754

**Mr. Stanley Tyler**  
1858 Boyle  
Memphis, TN 38114  
Home: (901) 775-1722  
Work: (901) 448-5661  
Fax: (901) 448-7735

**Ms. Elizabeth Young**  
2347 Saratoga Avenue  
Memphis, TN 38114-2312  
Home: (901) 458-1703

### **Civic Representatives**

**Mr. Jim Covington**

Executive Director  
Memphis Depot Redevelopment Corporation  
2163 Airways Blvd., Suite 140  
Memphis, TN 38114  
Work: (901) 942-4939 Fax: (901) 942-5131  
E-mail: [jcovington@memphisdepot.net](mailto:jcovington@memphisdepot.net)

**Ms. Janet Hooks**

Memphis City Council  
125 N. Mid-America Mall 5th Floor  
Memphis, TN 38103  
Work: (901) 576-6786 Fax: (901) 576-6796

**Dr. Cleo Kirk**

Shelby County Board of Commissioners  
1245 Semmes St.  
Memphis, TN 38111  
Work: (901) 743-5723 Fax: (901) 745-2402

**Mr. Norm LaChapelle**

Memphis/Shelby County Health Department  
814 Jefferson Avenue  
Memphis, TN 38105  
Work: (901) 544-7582 Fax: (901) 544-7475

**Mr. Torrence Myers**

Memphis Light, Gas and Water Company  
PO Box 430  
Memphis, TN 38101-0430  
Work: (901) 320-3901 Fax: (901) 320-3995

### **BCT Representatives**

**Mr. Turpin Ballard**

Environmental Protection Agency  
Federal Facilities Branch  
61 Forsyth Street  
Atlanta, GA 30303  
Work: (404) 562-8553 Fax: (404) 562-8518  
E-mail: [ballard.turpin@epa.gov](mailto:ballard.turpin@epa.gov)

**Mr. Jim Morrison**

Tennessee Department of Environment and Conservation  
401 Church St., 4th Floor, L&C Annex  
Nashville, TN 37249-1535  
Work: (615) 532-0910  
E-mail: [jim.morrison@state.tn.us](mailto:jim.morrison@state.tn.us)

### **Remedial Project Managers and Other Contacts**

**Angela McMath**

Program Manager  
MACTEC Engineering and Consulting  
3200 Town Pointe Drive NM #100  
Kennesaw, GA 30144  
Ph: (770) 590-4601  
[almcmath@mactec.com](mailto:almcmath@mactec.com)

**Thomas Holmes**

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MACTEC Engineering and Consulting  
3200 Town Pointe Drive NM #100  
Kennesaw, GA 30144  
Ph: (770) 421-3373  
[tcholmes@mactec.com](mailto:tcholmes@mactec.com)

**Denise Cooper**

Environmental Specialist  
MACTEC Engineering and Consulting  
2163 Airways Blvd., Building 144  
Memphis TN 38114  
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[Dcooper1@midsouth.rr.com](mailto:Dcooper1@midsouth.rr.com)

**Alma Black Moore**

Community Relations Specialist  
Frontline Corporate Communications  
2163 Airways Blvd., Building 144  
Memphis TN 38114  
Ph: (901) 774-3683  
Fax: (901) 774-3663

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Defense Distribution Center Public Affairs Officer  
2001 Mission Drive, Bldg 1  
New Cumberland, PA 17070-5000  
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[jackie.noble@dla.mil](mailto:jackie.noble@dla.mil)

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Air Force Center for Environmental Excellence  
3300 Sidney Brooks  
San Antonio, TX 78260  
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[jesse.perez@brooks.af.mil](mailto:jesse.perez@brooks.af.mil)

**Bruce Railey**

Corps of Engineers  
Huntsville Support Center  
P.O. Box 1600  
Huntsville, AL 35807-4301  
Ph: (205) 895-1463  
bruce.railey@usace.army.mil

**Tiki Whitfield**

Community Relations  
EPA Region 4, Federal Facilities Branch  
61 Forsyth Street, SW  
Atlanta, GA 30303  
Ph: (404) 562-8530  
whitfield.tiki@epa.gov

**David Nelson**

Project Manager  
CH2M HILL  
115 Perimeter Center Place, NE  
Suite 700  
Atlanta, GA 30346-1278  
Ph: (770) 604-9182 ext. 394  
dnelson@ch2m.com

**John Miller**

Mitretek Systems  
3150 Fairview Park Drive South  
Falls Church, VA 22042-4519  
Ph: (703) 610-2560  
jmiller@mitretek.org

## **Attachment 2: Information Repositories**

**The Memphis Depot  
Community Reading Room  
Environmental Division**

2163 Airways Blvd.,  
Building 144  
Memphis, TN 38114 - 5210  
(901) 774-3683

**Hours:**

Call for an appointment

**Memphis/Shelby County Health Dept.  
Pollution Control Division**

814 Jefferson Avenue  
Memphis, TN 38106  
(901) 576-7775

**Hours:**

Monday to Friday 7:30 a.m. to 4:30 p.m.

**Cherokee Branch Public Library**

3300 Sharpe Avenue  
Memphis, TN 38111-3758  
(901) 743-3655

**Hours:**

Monday to Wed. 10 a.m. to 6:30 p.m.  
Thursday Noon to 6:30 p.m.  
Saturday Noon to 6 p.m.

Information Repositories will be consolidated into one location as community usage declines.

**Attachment 3: Media List:**

**Newspapers**

The Commercial Appeal  
495 Union Ave., Memphis, TN 38103-3217  
Phone: 901.529.2211

The Daily News Publishing Company  
193 Jefferson, Memphis, TN  
P.O. Box 3663, 38103  
Phone: 901.523.1561

La Prensa Latina Hispanic Newspaper  
995 S. Yates Rd., Memphis, TN 38119  
Phone: 901.751.2100

Memphis Business Journal  
88 Union Ave., Suite 102, Memphis,  
TN 38103-5184  
Phone: 901.523.1000

The Memphis Flyer  
460 Tennessee, Memphis, TN 38101-1738  
Phone: 901.521.9000

Tri-State Defender  
124 East G.E. Patterson Ave., Memphis, TN P.O.  
Box 2065, 38103  
Phone: 901.523.1818

Silver Star News  
3019 Park Ave., Memphis, TN 38114-2723  
Phone: 901.452.8828

Desoto Appeal  
230 Goodman Rd., Southaven, MS  
901.333.2020

**RADIO STATIONS**

Clear Channel Radio Stations  
2650 Thousand Oaks, Suite 4100  
Memphis, TN 38118

KJMS-FM V101.1  
Oldies R&B  
Phone: 901.529.4300

WHRK-RM 97.1  
Hip Hop, Rhythm & Blues  
901-529-4368

KWAM-AM 990  
Family Values Radio  
Phone: 901.529.4300

WEGR-FM 102.7  
Rock 103  
Phone: 901.578.1160

WDIA-AM 1070  
Old School R&B, Blues, Talk  
Phone: 901.529.4368

WREC-AM 600  
Talk/News  
Phone: 901.578.1160

WHAL-FM 95.7  
Hallelujah FM/Gospel  
Phone: 901.578.1160  
Flinn Broadcasting

6080 Mt. Moriah  
Memphis, TN 38115  
901.375.9324

KXHT-FM 107.1  
Hip Hop, Rap

WHBQ-FM 107.5  
Top 40

WHBQ-AM 560  
Sports Talk

WRVR-FM 104.5  
Adult Contemporary  
5904 Ridgeway Center Pkwy.  
Memphis, TN 38120  
901.767.0104

WMBZ-FM 94.1  
Alternative Rock  
5904 Ridgeway Center Pkwy.  
Memphis, TN 38120  
901.683.9400

WMC-FM 99.7  
FM 100 Today's Best Mix  
1960 Union Ave.  
Memphis, TN 38104  
901.726.0555

WMC-AM 790  
Sports  
1960 Union Ave.  
Memphis, TN 38104  
901.274.7979

WKNO-FM 91.1  
National Public Radio  
900 Getwell Rd.  
Memphis, TN 38111  
901.325.6544

WYPL-FM 89.3  
News for the Visually Impaired  
Memphis Public Library  
3030 Poplar Ave., Memphis, TN 38111  
901.725.8833

WVUN-AM 1240  
Gospel

WGSF-AM 1030  
Hispanic

WHRK-FM 1430  
Disney

WGKX-KIX 106  
Country  
5629 Murray Rd.  
Memphis, TN 38119  
901.682.1106

WJCE-AM 680  
Easy Listening  
5904 Ridgeway Center Pkwy.  
Memphis, TN 38120  
901.767.0104

WUMR-FM 91.7  
Jazz  
The University of Memphis  
Memphis, TN 38152  
901.678.3176

WLOK-AM 1340  
Gospel  
363 S. Second St.  
Memphis, TN 38103  
901.527.9565

WQOX-FM 88.5  
Memphis City Schools  
3333 Covington Pike  
Memphis, TN 38128  
901.385.4317

WEVL-FM 89.9  
Non-profit Diversified Alternative  
PO Box 40952  
Memphis, TN 38174  
901.528.0560

**Television Stations**

WHBQ-TV Channel 13  
Fox Affiliate  
485 S. Highland St., Memphis, TN 38111  
Phone: 901.320.1313

WLMT-TV  
UPN Affiliate  
2701 Union Ave. Ext., Memphis, TN 38112  
Phone: 901.323.2430

WPTY-TV Channel 24  
ABC Affiliate  
2701 Union Ave. Ext., Memphis, TN 38112  
Phone: 901.323.2430

WYPL-TV Channel 18  
3030 Poplar Ave.  
Memphis, TN 38111  
901.415.2700

WKNO-TV  
PBS Affiliate  
900 Getwell Rd. Memphis, TN 38111  
Phone: 901.458.2521

WMC-TV Channel 5  
1960 Union Ave., Memphis, TN 38104  
Phone: 901.726.0555

WREG-TV Channel 3  
803 Channel 3 Dr., Memphis, TN 38103  
Phone: 901.543.2333

**Attachment 4: Interview Questionnaire  
Community Interview Questionnaire --June, 2004**

1. What is your understanding of the history of the site?
2. When did you first become aware of the problems at the site?
3. Have you had any problems on your property that you think are attributable to the site?
4. What contacts have you had with government officials about the site?
5. Do you feel these officials have been responsive to your concerns?
6. What are your current concerns about the site?
7. Have you participated in activities concerning the site?
8. How would you like to be involved in future community relations activities?
9. What kind of information about the site do you need?
10. How do you want to get that information and how frequently?
11. Can you suggest other people or groups who have concerns about the site and should be interviewed?

## Attachment 5: Area Schools and Churches

### Area Schools

Airways Middle (Gr. 6-8)  
2601 Ketchum Road  
Memphis, TN 38114  
Dr. Charlie Folsom, Principal  
(901) 416-5006  
Fax 416-5009

Dunn Elementary (Early Childhood-5)  
1500 Dunn Road  
Memphis, TN 38106  
Ms. Sandra Sargent, Principal  
(901) 416-7816  
Fax 416-7817

Hamilton Elementary (K-5)  
1378 Ethlyn Avenue  
Memphis, TN 38106  
Mr. Michael Hawkins, Principal  
(901) 416-7826  
Fax 416-7827

Hamilton High (9-12)  
1363 Person Avenue  
Memphis, TN 38106  
Mr. Isaac White, Principal  
(901) 416-7838  
Fax 416-7829

Bethel Grove Elementary (Preschool-5)  
2459 Arlington  
Memphis, TN 38114  
Dr. Shirley Jenkins, Principal  
(901) 416-5012  
Fax 416-5005

Sharpe Elementary (Preschool-5)  
3431 Sharpe Avenue  
Memphis, TN 38111  
Mr. Gary Zimmerman, Principal  
(901) 416-5020  
Fax 416-5022

Alcy Elementary (Gr. K-5)  
1750 Alcy Road  
Memphis, TN 38114  
Dr. Murphysteen Campbell, Principal  
(901) 416-7800  
Fax 416-7862

Norris Elementary (K-6)  
1490 Norris Road  
Memphis, TN 38106  
Ms. Yolanda Jordan, Principal  
(901) 416-7876  
Fax 416-7878

Hamilton Middle (6-8)  
1478 Wilson Street  
Memphis, TN 38106  
Mr. Willie Rhodes, Principal  
(901) 416-7832  
Fax 416-3314

Corry Middle (6-8)  
2230 Corry Road  
Memphis, TN 38106  
Ms. Joyce Kelly, Principal  
(901) 416-7804  
Fax 416-7863

Charjean Elementary (K-5)  
2140 Charjean  
Memphis, TN 38114  
Ms. Bettye King, Principal  
(901) 416-5016  
Fax 416-5018

Magnolia Elementary (Preschool-6)  
2061 Livewell Circle  
Memphis, TN 38114  
Ms. Jacqueline Sales, Principal  
(901) 416-4578  
Fax 416-4580

**Day Care Centers / Private Schools**

**Kiddie Kollege Child Care Center**

1980 Person Avenue  
Memphis TN 38106

**Bethel Outreach Daycare**

1350 Alcy Road  
Memphis TN 38106

**Just Us Kids Day Care**

2244 Alcy Road  
Memphis TN 38114

**Alcy SDA Jr. Academy**

1325 Alcy Road  
Memphis TN 38106

**Cultural Connection Headstart**

2288 Dunn Avenue  
Memphis TN 38106

**Area Churches**

**Pentecostal MBC**

1538 Norris Road  
Memphis TN 38106

**Macedonia MBC**

2093 Perry Road  
Memphis TN 38106

**Norris Ave. Baptist Church**

1437 Norris Road  
Memphis TN 38106

**Powerhouse Ministries Revival Center**

1350 Norris Road  
Memphis TN 38106

**God's Amazing Grace MBC**

560 Person Avenue  
Memphis TN 38106

**Freedom MBC**

1665 Rayner Street  
Memphis TN 38106

**St. Peter MBC**

1410 Pillow Street  
Memphis TN 38106

**Rock of Ages COGIC**

2153 Perry Road  
Memphis TN 38106

**New Little Rock MBC**

1499 Norris Road  
Memphis TN 38106

**Apostolic Deliverance Temple**

1369 Norris Road  
Memphis TN 38106

**Christ Independent Church**

1789 Cincinnati Road  
Memphis TN 38106

**Oak Hill MBC**

1725 Rayner Street  
Memphis TN 38106

**New Bethel Baptist**

2225 Ball Road  
Memphis TN 38106

**Pillow Street CME**

1590 Pillow Street  
Memphis TN 38106

## Attachment 6:

### Glossary

**Administrative Record (AR).** A file that contains information that forms the basis for the selection of a response action, including verified sampling data, quality control and quality assurance documentation, site inspection and evaluation reports.

**Cleanup Actions.** Taken to deal with a release or threatened release of substances that could affect public health or the environment. The term is often used broadly to describe various response actions or phases of remedial responses, such as the Remedial Investigation/Feasibility Study (RI/FS).

**Closed Status.** Used to describe a site that is both finished according to DoD, and the State Regulatory Agency has granted a closure letter concurring that No Further Remedial Action Planned (NFRAP)

**Comment Period.** A time period, usually lasting 30 days, for the public to review and comment on various documents and actions.

**Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).** A Federal Law, commonly known as Superfund, passed in 1980 and modified in 1986 by the Superfund Amendments and Reauthorization Act (SARA).

**Community Involvement Plan (CIP).** The CIP is designed to ensure citizens opportunities for public involvement at the site, determine activities that will provide for such involvement, and allow citizens the opportunity to learn about the site. It outlines specific community involvement activities that occur during the remedial response actions at IRP sites.

**Decision Document (DD).** A formal record of significant decisions on cleanup alternatives for a particular site. Decision documents are typically prepared to record the following decisions: no further action, selection of a remedy, implementation of a sampling or monitoring program.

**Fire Training (FT).** Areas used by military fire department personnel for training purposes.

**Groundwater.** Water found beneath the earth's surface that fills spaces between layers of sand, soil and rock. In aquifers, groundwater occurs in sufficient quantities that can be used as a source of water for drinking, irrigation and other purposes. At the former Memphis Depot, shallow groundwater is 5 to 15 feet deep and is not used for human consumption. It is separated from the City's drinking water supply (by 800 feet of dense clay.)

**Hazardous Substance.** Any material that poses a threat to public health and/or the environment. Typical hazardous substances are materials that are toxic, corrosive, ignitable, explosive or chemically reactive.

**Hazardous Waste.** A waste, or combination of wastes, which, because of its quantity, concentration, or physical, chemical, or infectious characteristics, may either cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible illness; or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed. It is regulated under the Resource Conservation and Recovery Act (RCRA).

**Impacts.** An assessment of the meaning of changes in all attributes being studied for a given resource; an aggregation of all the adverse effects, usually measured using a qualitative and nominally subjective technique. Environmentally, the word impact is usually synonymous with the word effect.

**Installation Restoration Program (IRP).** The DoD's nationwide plan to identify, investigate and if necessary, clean up environmentally impacted areas at military facilities that resulted from previous waste disposal practices or

accidental spills. Most of these activities occurred years before laws were passed or knowledge was obtained that these practices posed potential problems.

**Information Repository (IR).** A file containing current information, technical reports, reference documents and Technical Assistance Grant applications information. The information repository is usually located in a public building that is convenient for local residents, such as a public school, city hall or library.

**Landfill (LF).** Disposal facilities where waste is placed in or on land that is not a land treatment facility, a surface impoundment or an injection well.

**Preliminary Assessment (PA).** The process of collecting and reviewing available information about a known or suspected hazardous waste site or release. The U.S. EPA or states use this information to determine if the site requires further study. If further study is needed, a site inspection is undertaken.

**Proposed Plan (PP).** A plan summarizing the proposed remedial action at a site. The plan is available for public comment.

**Record of Decision (ROD):** A detailed document outlining the environmental conditions of a site, and an evaluation of various cleanup technologies for restoring the site to acceptable, health-protective standards for the intended reuse of the site. The ROD documents the chosen cleanup remedies and provides a rationale for why the remedies were selected.

**Remedial Action (RA).** The actual construction or implementation phase that follows the remedial design of the selected cleanup alternative at a site.

**Remedial Design (RD).** An engineering phase that follows the Record of Decision when technical drawings and specifications are developed for the subsequent remedial action at a site.

**Remedial Investigation/Feasibility Study (RI/FS).** The investigations and analytical studies conducted if the results of the site investigation reveal extensive environmental impact. The RI is intended to fully define the type and extent of environmental impact at a site and establish criteria for cleaning up a site. The FS is intended to identify and screen potential alternatives to clean up environmentally impacted sites and analyze in detail the technologies and costs of the cleanup alternatives.

**Remedial Response.** A long-term action that stops or substantially reduces a release or threatened release of hazardous substances that is serious but does not pose an immediate threat to public health and/or the environment.

**Resource Conservation and Recovery Act (RCRA).** A federal law that established a regulatory system to track hazardous substances from generation to disposal. The law requires safe and secure procedures to be used in treating, transporting, storing and disposing of hazardous substances.

**Responsiveness Summary.** A summary of oral and written public comments received during a public comment period. The responsiveness summary is a key part of the Record of Decision, highlighting community concerns.

**Restoration Advisory Board (RAB).** The RAB's mission is to establish and facilitate a forum with the community, the BRAC Cleanup Team and the Depot for the input and exchange of information in an open and interactive dialogue concerning the environmental cleanup program. Through the RAB, stakeholders may review progress and give advice relating to the decision making process.

**Site Inspection (SI).** The phase of the Installation Restoration Program that follows the Preliminary Assessment. During the site inspection, more extensive information about the types and amounts of environmental impact and other important information about the site is collected to evaluate the appropriate course of action. This normally includes actual field-testing and sampling.

**Superfund Amendments and Reauthorization Act (SARA).** Modifications to the CERCLA enacted on October 17, 1986.

**Attachment 7: Depot EnviroNews Newsletter and Fact Sheets 2004**

**(A complete archive of newsletters and fact sheets is available for review at the IRs. Copies of newsletters and fact sheets can also be reviewed on the Depot's website at [www.ddc.dla.mil/memphis](http://www.ddc.dla.mil/memphis))**

## FOST #3 clears more Depot property for transfer

The public is asked to comment on the third Finding of Suitability to Transfer (FOST) prepared by the Defense Logistics Agency (DLA) and the Department of the Army for surplus property at the former Defense Distribution Depot. A 30-day public comment period began March 25, 2004.

FOST #3 consists of 65 buildings and 249.21 acres of open land areas on the former Main Installation, which is now known as the Memphis Depot Business Park. It also includes 37.45 acres of recreational property, which includes the former Depot golf course.

The FOST process is a requirement of the Base Realignment and Closure (BRAC) Act to transfer the ownership of federal property for community redevelopment. FOST #3 includes a report that details the historic uses of the property and buildings proposed

for transfer, as well as any environmental issues and cleanup remedies that may have been required.

The report concludes that, in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), the Memphis Depot Business Park area is suitable for transfer to the Memphis Depot Redevelopment Corporation (DRC) while the golf course area is suitable for transfer to the City of Memphis.

The Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC) have reviewed FOST #3. It is now available for review in the Depot's Information Repositories at the Cherokee Branch Library, Memphis/Shelby County Health Department, and the Memphis Depot Community Outreach Room.

## PUBLIC COMMENT PERIOD

*MARCH 25-  
APRIL 26, 2004*

Written comments can be sent to:

Mr. Mike Dobbs  
BRAC Environmental Coordinator  
Memphis Depot Business Park  
2163 Airways Blvd., Building 144  
Memphis, TN 38114-5210  
Email: michael.dobbs@dla.mil

You may also provide verbal comments by phone at (901) 544-0613.

For more information about FOST #3 or the ongoing environmental restoration program at the former Memphis Depot, call the Community Relations Office at (901) 544-0613.



## Goodbye John!

The Defense Logistics Agency and the Memphis Depot environmental team bid a fond farewell to John

De Back who left the Depot at the end of March to take a position at the Pentagon.

Mr. De Back joined the Depot team in 1993 as the Base Transition Coordinator. In that role, he managed the closure of the Depot and acted as a liaison between the Memphis Depot Redevelopment Corporation (DRC) and the environmental cleanup team to ensure that cleanup issues related to the DRC's plans for reuse were addressed.

He took on additional duties as the Depot Site Manager in 1999 and the

Base Realignment and Closure (BRAC) Environmental Coordinator (BEC) in 2001. As the BEC, he was responsible for overseeing the cleanup program at the Depot and working with regulators as a member of the BRAC Cleanup Team (BCT). He also served as the Facility Co-Chair of the Restoration Advisory Board.

"I've enjoyed working together with the RAB, the community and the environmental team over the years as the cleanup program has progressed," said Mr. De Back. "It is gratifying to me to see so much of the Main Installation already being reused by the community, and the environmental team preparing to start the final Remedial Action phase of the cleanup program at both the MI and Dunn Field." □

## COMMUNITY CONTACTS

Please contact us if you have any questions or comments about the environmental cleanup program or the former Memphis Depot:

**COMMUNITY INFORMATION LINE**  
(901) 544-0613

**ENVIRONMENTAL PROGRAM OVERSIGHT/ TECHNICAL SUPPORT**  
Mike Dobbs, Environmental Program Manager, Defense Distribution Center (DDC)  
PHONE: (717) 770-6950  
EMAIL: michael.dobbs@dla.mil

**MEDIA INQUIRIES/ PUBLIC AFFAIRS**  
Jackie Noble, Command Affairs Officer, DDC  
PHONE: (717) 770-6223  
EMAIL: jackie.noble@dla.mil

# Focus on the Future:

## Cleanup milestones for 2004 and beyond

The goal of the Memphis Depot cleanup program is to restore the Depot property and ensure it is safe for community reuse. The environmental team will start the final stages of the cleanup program – as set out in the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) – this spring. The following have been set as targets for reaching cleanup program milestones in 2004 and beyond:

### Spring 2004

#### Dunn Field Record of Decision (ROD)

The Record of Decision provides the justification for the proposed cleanup actions chosen for soil and groundwater at Dunn Field, according to standards approved by the Environmental Protection Agency (EPA). It contains a complete site history and description, and details of the environmental investigation and conditions. The ROD also includes a Responsiveness Summary that addresses community questions and concerns about the site. The ROD is available for public review in the Depot's Information Repositories (IRs).

#### Remedial Design (RD), Main Installation (MI)

The RD is a technical analysis of the selected cleanup remedy for soil and groundwater at the MI. It will include a detailed set of plans for implementing the cleanup remedies and any ongoing, long-term monitoring or other land-use controls that may be required.

#### RD Work Plan, Dunn Field

The RD Work Plan will document the environmental contractor's detailed plans for conducting the technical analysis of the selected cleanup remedies for Dunn Field.

### Summer 2004

#### Zero-Valent Iron (ZVI) Pilot Test Results, Dunn Field

The Depot's environmental contractor conducted a treatability study on Dunn Field in 2003 to pilot test the effectiveness of environmental cleanup technologies proposed for the site. ZVI is one of the recommended treatments for groundwater in the shallow aquifer at Dunn Field, and the results of the pilot test will determine if it is effective at breaking down the volatile organic compounds in the groundwater at Dunn Field into safe compounds that will be naturally degraded over time.

### Fall 2004

#### Remedial Action (RA) Work Plan, MI

The RA Work Plan will document the environmental contractor's detailed plans for implementing the selected cleanup remedies for soil and groundwater at the Main Installation. These remedies will ensure the MI, now known as the Memphis Depot Business Park, remains safe for current and future use. The selected remedy for groundwater at the MI is enhanced

bioremediation. The selected remedy for soil is excavation and off-site disposal. Once the remedies are completed, institutional controls for the MI will ensure future use of the property continues to be protective of human health. The selected remedies are detailed in the MI ROD, which is available for public review in the Depot's IRs.

### Winter 2004/2005

#### RD, Dunn Field

The RD Report is a technical analysis of the selected cleanup remedies for soil and groundwater at Dunn Field. It will include a detailed set of plans for implementing these remedies, and any ongoing, long-term monitoring or other land-use controls that may be required. The selected remedies for Dunn Field are:

- Excavation and offsite disposal of affected soil and debris from the disposal sites
- Soil Vapor Extraction (SVE) of soil containing solvents
- Institutional controls for surface soil on the west side of Dunn Field
- Zero-Valent Iron (ZVI) injection, Permeable Reactive Barrier (PRB), and Monitored Natural Attenuation with institutional controls for groundwater

### Spring 2005

#### Finding of Suitability to Transfer (FOST) #4 Public Comment Period, Dunn Field

The FOST process is a requirement of the Base Realignment and Closure (BRAC) Act and includes a public comment period to allow the public to provide their input on the Depot's plans to transfer the ownership of federal property for community redevelopment. FOST #4 will include a report that details the historic uses of the property at Dunn Field that is proposed for transfer, as well as any environmental issues and cleanup remedies that may have been required.

### Summer 2005

#### RA Work Plan, Dunn Field

The RA Work Plan will document the environmental contractor's detailed plans for implementing the selected cleanup remedies for soil and groundwater at Dunn Field.

\*Dates are based on current projections and are subject to change.



The pre-design investigation of 17 disposal sites on Dunn Field was completed in the winter of 2004. The investigation confirmed the locations, contents and conditions of buried waste, and the results will be used in the Dunn Field Remedial Design. Shown here are an exploratory excavation trench (top) and examples of excavated materials such as tins containing C-rations (bottom) and dental impression clay.



# Introducing . . . AFCEE and MACTEC

The Defense Logistics Agency (DLA) welcomes two new members to the environmental restoration team at the former Memphis Depot – the Air Force Center for Environmental Excellence (AFCEE) and MACTEC Engineering and Consulting.

AFCEE has joined the team as the service agent for the environmental restoration program. Jesse Perez, Program Manager with AFCEE, is the point of contact between DLA and Depot staff and the environmental companies contracted on behalf of DLA to complete the construction and operation of the selected cleanup actions.

AFCEE is located at Brooks City Base in San Antonio, TX. Since it was formed in 1991, AFCEE has been the principal environmental services agency for the United States Air Force. In 2001, DLA hired AFCEE to review and evaluate several of its ongoing environmental restoration programs to ensure they were moving efficiently and effectively towards cleanup. In 2003, AFCEE took over as service agent at DLA sites in Richmond and Memphis.

Headquartered in Atlanta, MACTEC Engineering and Consulting is a leader in the engineering, environmental and remedial construction industries. The company has more than 100 U.S. offices and 4,000 employees with specialists in more than 50 scientific and engineering disciplines. The company has been working with DLA since 1990 on the environmental restoration program at the Defense Supply

Center in Richmond, Virginia. MACTEC joined the Memphis environmental team in 2003.

“We are the remedial action contractor for the Memphis cleanup program,” explained Tom Holmes, MACTEC’s project manager in Memphis. “What that means is we will be assisting CH2M HILL to complete the remedial design for the cleanup remedies in the Records of Decision for the MI and Dunn Field. Once that phase is completed, we’ll create a work plan and implement the remedy as required for close-out of the site. We have also taken over the operation and maintenance of the pump and treat system, and will be responsible for ongoing monitoring.”

Holmes, an environmental professional since 1980 with a background in geology, is familiar with Base Realignment and Closure (BRAC) sites. He was part of the MACTEC team that helped close out and transfer the former Bergstrom Air Force Base in Texas, which is now the Austin-Bergstrom International Airport. Joining him on the MACTEC team is Greg Wrenn, MACTEC’s lead engineer on the Depot project, who will be onsite regularly to oversee the implementation of the remedial actions.

MACTEC will also be assisting with overall program management throughout the completion of the environmental program at the Depot. □

## Pilot study proves enhanced bioremediation works at MI

The tiny natural organisms living in the groundwater beneath the Depot’s Main Installation prefer sodium lactate to vegetable oil.

It’s an important finding for the Depot’s environmental team as they complete a one-year pilot study to determine the effectiveness of enhanced bioremediation as a cleanup remedy for groundwater at the Main Installation (MI).

Naturally occurring organisms present in the environment help to break down, or degrade, chemicals, such as the chlorinated solvents found in the groundwater at the MI, into safe, natural compounds. This process is called bioremediation. Enhanced bioremediation involves injecting natural nutrients into the groundwater as an additional “food” source for these organisms that “enhances” or speeds up the natural bioremediation process by encouraging the growth and development of more organisms.

According to David Nelson, a Project Manager with the Depot’s environmental contractor, CH2M HILL, two study areas were set up at the MI. Vegetable oil was added to the groundwater through injection wells at Study Area 1 in the southwest corner of the MI. Another organic nutrient, sodium lactate, was added to the groundwater at Study Area 2 in the southeast corner of the MI.

“Tests showed that the conditions at both sites had changed favorably to support the organisms needed to breakdown the chlorinated chemicals found in the groundwater,” said Nelson. “But the most dramatic changes occurred at Study Area 2.”

At Study Area 1, concentrations of trichloroethene (TCE) and tetrachloroethene (PCE) declined faster than would have occurred naturally. But the process took place slowly over the course of a year, and

the study’s results indicate that some of the solvents were actually absorbed by the vegetable oil rather than degraded.

At Study Area 2, the concentrations of TCE and PCE declined significantly within three months of the first lactate injection. The rate of decline appeared to slow down as the lactate was depleted or diluted, but additional lactate injections resulted in a continuing decline and TCE and PCE were eventually reduced within the study area.

Importantly, another chlorinated chemical in the groundwater in Study Area 2, carbon tetrachloride, was completely removed during the study period. Dichloroethene (DCE), a chemical byproduct that commonly results during the breakdown of TCE and PCE, was not successfully removed in either area. But Nelson says this may be because the sampling period ended before further breakdown could occur.

Based on these results, CH2M HILL’s report recommends that a full-scale treatment program for the MI be designed using multiple injections of lactate to remove TCE and PCE from the groundwater.

CH2M HILL estimates it would take approximately two years to treat the most affected areas of the MI using both enhanced bioremediation and natural attenuation. These results will now be incorporated in the Remedial Design (RD) Report for the MI. The report will include a detailed set of plans for implementing the enhanced bioremediation as the preferred cleanup remedy.

For more information on the results of the enhanced bioremediation pilot study, or the Depot’s ongoing cleanup program, call the Community Relations office at (901) 544-0613. □

The Memphis Depot  
Building 144,  
2163 Airways Blvd.  
Memphis, TN 38114

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The Information Repositories are at the following locations:

The Depot, 2163 Airways Blvd., Bldg. 144,  
Memphis, TN (901) 544-0613

The Community Outreach Room is located in Building  
144. Please call ahead for an appointment to ensure  
that we are available to help you.

Memphis/Shelby County Health  
Department, Pollution Control Division  
814 Jefferson Ave., Memphis, TN  
(901) 576-7775

The Pollution Control Division is open Monday  
to Friday from 7:30 a.m. to 4:30 p.m.

Memphis/Shelby County Public Library,  
Cherokee Branch, 3300 Sharpe Ave.,  
Memphis, TN (901) 743-3655  
The Cherokee Branch is open Monday to Thursday  
from 10 a.m. to 6 p.m. and Saturday from 10 a.m. to  
6 p.m. Closed on Friday & Sunday.

## HOW TO REACH US....

If you have any questions or comments about the Depot's environmental cleanup program,  
please feel free to contact any one of the following:

### Mike Dobbs

BRAC Environmental  
Coordinator  
The Memphis Depot  
2163 Airways Blvd.,  
Bldg. 144  
Memphis, TN 38114  
(717) 770-6950

### Turpin Ballard

United States  
Environmental  
Protection Agency  
61 Forsyth St., SW  
Atlanta, GA 30303  
(404) 562-8553

### Jim Morrison

Tennessee Department  
of Environment and  
Conservation  
401 Church St.,  
4th Floor, L&C Annex  
Nashville, TN 37243  
(615) 532-0910

### Mondell Williams

RAB Community  
Co-Chair  
667 Mallory Avenue  
Memphis, TN 38106  
(901) 946-9751



Jackie Noble  
Defense Distribution Center  
(717) 770-6223

Visit the Depot's website at [www.ddc.dla.mil/memphis](http://www.ddc.dla.mil/memphis)



EnviroNews is published by the Memphis Depot to  
update the public on the environmental cleanup  
program. If you have comments, questions, or  
suggestions for future articles, please call  
Ms. Alma Black Moore at (901) 544-0613.

## Depot plans community involvement initiatives for the future

Members of the Memphis Depot community met with staff from the Depot's Community Relations Office in June to talk about the Depot's ongoing communication efforts.



Helen Turner (left) and Merle Smith met with staff from the Depot's Community Relations Office in June.

The interviews focused on people's opinions on how well the Depot was informing the community. For instance, people were asked if they received enough information and was the information easily understood.

Twenty-three people were interviewed during the period June 24-26, 2004. They were selected randomly from various groups such as community members, ministers, former employees, principals and teachers, community and business leaders, politicians and media representatives. The interviews lasted from 15 minutes to an hour. The answers will help fine tune the Depot's communication efforts.

"The Defense Logistics Agency recognizes the importance of involving the community in the cleanup process," said Michael Dobbs, the Depot's BRAC Environmental Coordinator and Environmental Manager for the Defense Distribution Center (DDC). "Throughout the cleanup process our Community Relations Office and environmental team have taken a number of steps to keep the community informed and involved. We remain committed to ongoing communication as we begin the Remedial Design/Remedial Action phases of the cleanup program and move towards program completion."



Hattie Wooten discusses the Depot's community relations efforts with Gary DuPriest of the Depot's Community Relations Office.

The Depot staff also asked questions to identify current concerns with the Depot's environmental program. The community involvement activities will be revised to respond to the community concerns in the updated Community Involvement Plan.

The Community Relations Plan (CRP), written in 1999, details efforts to involve the community in the

## NEXT RAB MEETING

The Memphis Depot Restoration Advisory Board (RAB) will meet on:

**Thursday,  
Oct. 21, 2004  
at 6 p.m.**

The meeting will be held at the South Memphis Senior Citizens Center, located at 1620 Marjorie Street. The public is invited to attend this meeting to learn more about the Memphis Depot environmental restoration program.

For more information, call (901) 544-0613.

cleanup program. The updated plan is scheduled for release this fall. The CRP will change its name to Community Involvement Plan (CIP). The name change reflects the language used by the Environmental Protection Agency (EPA) in its Superfund Community Involvement Handbook.

The Depot's award winning community outreach program has included Community Information Sessions, community newsletters and fact sheets, meetings and presentations to neighborhood associations, school classes and community leaders, and media outreach. □

## Dunn Field Record of Decision signed

The Defense Distribution Center (DDC), Tennessee Department of Environment and Conservation (TDEC) and U.S. Environmental Protection Agency (EPA) have signed the Record of Decision (ROD) for Dunn Field at the former Memphis Depot.

This is the final ROD for the Depot and its completion marks an important milestone in the cleanup process. The Main Installation ROD was signed in 2001.

continued inside

#### Dunn Field Record of Decision... continued from cover

"This is a giant step forward for the environmental program, and for the community," said Michael Dobbs, Environmental Manager for the DDC, who also serves as the Depot's Base Realignment and Cleanup (BRAC) Environmental Coordinator.

"The Dunn Field ROD is the final document in the decision-making phase of the cleanup program. The studies are done, we've reached agreement on the best cleanup solutions for the site, and we are now moving forward to design and implement the cleanup remedies that will ensure the site is safe for current and future use."

The ROD outlines the nature and extent of environmental conditions at Dunn Field, and provides an evaluation of various cleanup technologies for restoring the site. It also documents the chosen cleanup remedies to restore environmental conditions at Dunn Field to acceptable, health-protective standards for the intended reuse of the site.

The remedies that have been selected satisfy the regulatory requirements outlined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA).

#### The remedy is summarized as follows:

- Soil and buried materials from disposal sites within areas totaling 7,200 square-feet on the western portion of Dunn Field will be excavated and removed for offsite disposal;
- Soil vapor extraction (SVE) will be used to remove solvents in the subsurface soil (on the western portion of Dunn Field);
- Groundwater beneath the western portion of Dunn Field and offsite to the west will be treated using a combination of Zero-Valent Iron (ZVI) injections, a Permeable Reactive Barrier (PRB), and Monitored Natural Attenuation including long-term monitoring.
- Land use controls will be implemented, which consist of the following institutional controls: deed and/or lease restrictions; Notice of Land Use Restrictions; existing zoning restrictions and existing groundwater well restrictions, to control exposure to affected soil and groundwater over the long term.

The ROD states that TDEC and EPA will also conduct reviews within five years of the start of a Remedial Action, and every five years thereafter, to ensure the remedies continue to be protective of human health and the environment.

The ROD also includes a Responsiveness Summary that addresses community questions about the site and the proposed cleanup remedies that were raised during the Dunn Field Proposed Plan Public Comment Period.

The ROD for Dunn Field is now available for public reference at the Memphis Depot's three Information Repositories, located at the Memphis Depot, Cherokee Branch Library, and the Memphis/Shelby County Health Department.

For more information on the environmental restoration program at the former Memphis Depot, call the Community Relations Office at (901) 544-0613. □

## Wells help cleanup planning:

As part of the Memphis Depot's ongoing environmental cleanup program, seven additional groundwater monitoring wells have been installed in the surrounding community. The wells are mainly being used to collect data that will help scientists to design and monitor the groundwater cleanup remedy, as outlined in the Dunn Field Record of Decision (ROD).

In May and June, monitoring wells were installed near the following areas:

- One well near the railroad tracks in the field west of Rozelle Street (Dunn Field);
- Five wells near the railroad tracks on Memphis Light, Gas, and Water property south-east of Menager Road and east of Meadowhill Street (Dunn Field);
- One well near the intersection of Sparks Street and Dempster Avenue (Main Installation).



New groundwater monitoring wells have been installed in the cleanup remedy for groundwater at Dunn Field.

## Main Installation Remedial Design completed

The Remedial Design (RD) has been completed for the Main Installation (MI) at the former Memphis Depot, clearing the way for the approved cleanup actions to begin.

The RD is the seventh of eight steps outlined in the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). Approved by the Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC), the RD describes the implementation steps for the approved cleanup remedy to ensure the ongoing protection of human health and the environment.

The cleanup remedy for the MI is an enhanced bioremediation treatment (EBT) program that will be used to treat chemicals known as volatile organic compounds (VOCs) in the shallow groundwater aquifer beneath the MI.

The affected groundwater is in the thin water-bearing layer known as the Fluvial aquifer. This aquifer is about 90 feet below the ground surface. This water is not used for drinking water, so there is no exposure to the community. The city's drinking water is drawn from the Memphis Sand aquifer, located roughly 250 feet below the ground surface.

EBT works by giving nutrients to naturally occurring organisms in the groundwater. The nutrients encourage the growth of more organisms and speeds up the natural bioremediation process. These organisms break down VOCs into other compounds that degrade to safe natural compounds over time. The nutrient will be provided by injection of sodium lactate, a safe, natural substance found in human skin tissue. The MI RD provides a design for mobile units that will inject sodium lactate into the groundwater through wells at different locations on the MI.

The RD also includes a Land Use Control Implementation Plan (LUCIP) for site-specific land use controls that will prevent future residential development on the site. A Long-Term Groundwater Monitoring Plan (LTM) outlines periodic testing of groundwater to make sure the EBT is working and cleanup objectives are being met.

The final phase of the CERCLA process is Remedial Action (RA). This is when the construction and operation of the cleanup remedy will take place. MACTEC Engineering and Consulting, the Depot's Remedial Action contractor, is currently preparing a draft of the RA work plan. □

# Off-site monitoring wells installed at Dunn Field



the Depot community to help gather data needed to design the

ProSonic Corporation drilled boreholes and installed the monitoring wells under the direction of MACTEC Engineering and Consulting.

MACTEC conducted the additional sampling to monitor groundwater conditions in the shallow aquifer beneath the Depot community. The Memphis Depot Base Realignment and Closure Cleanup Team (BCT) will use the data to design a Permeable Reactive Barrier (PRB) to treat the affected groundwater.

The PRB is recognized by the EPA as a cost-effective and reliable technology to treat groundwater containing chemicals such as the solvents, also known as volatile organic compounds (VOCs). At many sites, PRBs have replaced the traditional pump-and-treat systems as the preferred method for treating groundwater.

The PRB will be similar to an underground wall made of a permeable material, which means it has tiny holes that allow the groundwater to flow through. The wall is filled

with zero-valent iron (ZVI) particles, which break down chemicals in the groundwater into safe compounds. For sites with groundwater deeper than 50 feet, such as at the Depot, a PRB is formed by injecting a gel containing ZVI into the ground through a series of boreholes spaced five to 15 feet apart.

The Depot's environmental team has proposed a 1,000-foot-long PRB on property owned by Memphis Light, Gas and Water that is in the natural path of the groundwater flowing from Dunn Field. As the groundwater flows through the wall, the ZVI will act as a catalyst to breakdown the VOCs into safe compounds.

The Environmental Protection Agency (EPA) and the Tennessee Department of Environment and Conservation (TDEC) will review the design prior to installation of the PRB. When installed, the effectiveness of this remedy will be reviewed at five-year intervals to ensure it is working as planned. □

## Checking groundwater flow on Dunn Field

The Dunn Field groundwater recovery system was turned off twice this summer – once in June to evaluate groundwater flow conditions and a second time in July to accommodate City of Memphis road work project.

Before shutting down the system in June, the Depot's contractor, MACTEC Engineering and Consulting, collected water level measurements from monitoring wells located on and near Dunn Field. Once the system was off, field staff waited four days to allow the groundwater flow to stabilize and return to normal conditions before measuring water levels again. The system shutdown and the procedures for water level measurements were approved by the BCT Cleanup Team (M. Dobbs of DDC, T. Ballard of EPA and J. Morrison of TDEC) ahead of time.

“The purpose of the Dunn Field groundwater recovery system is to limit affected groundwater from leaving the Depot property until a permanent remedy is in place,” said Tom Holmes, MACTEC's Project Manager. “We know that the estimated groundwater flow rates are fairly slow. And we're

confident that shutting down the system for a short period of time will only have a minor impact on groundwater conditions beyond the Depot property.”

The results of the water level measurements will be used to evaluate the effect of the recovery system on groundwater flow in the areas where wells are located. The information will be used, along with data from the long-term monitoring wells, to design the final groundwater remedy approved in the Dunn Field Record of Decision (ROD).

In July, the groundwater recovery system was turned off to accommodate a City of Memphis project to widen Hays Road and

improve the intersection at Person Avenue. City workers replaced a section of sewer pipe that connects the groundwater recovery system to the municipal wastewater system. The pumps were shut down using approved maintenance procedures to ensure maximum safety and prevent exposure to affected groundwater.

For more information on the groundwater recovery system, call the Memphis Depot Community Relations Office at (901) 544-0613. □



A City of Memphis road works crew widens Hays Road

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Building 144,  
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Memphis, TN 38114

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Memphis, TN (901) 544-0613

The Community Outreach Room is located in Building  
144. Please call ahead for an appointment to ensure  
that we are available to help you.

Memphis/Shelby County Health  
Department, Pollution Control Division  
814 Jefferson Ave., Memphis, TN  
(901) 576-7775

The Pollution Control Division is open Monday  
to Friday from 7:30 a.m. to 4:30 p.m.

Memphis/Shelby County Public Library,  
Cherokee Branch, 3300 Sharpe Ave.,  
Memphis, TN (901) 743-3655  
The Cherokee Branch is open Monday to Thursday  
from 10 a.m. to 6 p.m. and Saturday from 10 a.m. to  
6 p.m. Closed on Friday & Sunday.

## HOW TO REACH US....

If you have any questions or comments about the Depot's environmental cleanup program,  
please feel free to contact any one of the following:

**Michael Dobbs**  
BRAC Environmental  
Coordinator  
The Memphis Depot  
2163 Airways Blvd.,  
Bldg. 144  
Memphis, TN 38114  
(717) 770-6950

**Turpin Ballard**  
United States  
Environmental  
Protection Agency  
61 Forsyth St., SW  
Atlanta, GA 30303  
(404) 562-8553

**Jim Morrison**  
Tennessee Department  
of Environment and  
Conservation  
410 Church St.,  
4th Floor, L&C Annex  
Nashville, TN 37243  
(615) 532-0910

**Mondell Williams**  
RAB Community  
Co-Chair  
667 Mallory Avenue  
Memphis, TN 38106  
(901) 946-9751



Jackie Noble  
Defense Distribution Center  
(717) 770-6223

Visit the Depot's website at [www.ddc.dla.mil/memphis](http://www.ddc.dla.mil/memphis)



EnviroNews is published by the Memphis Depot to  
update the public on the environmental cleanup  
program. If you have comments, questions, or  
suggestions for future articles, please call  
Ms. Alma Black Moore at (901) 544-0613.



## **Additional wells for early cleanup action at former Depot**

**November 2004**—The City of Memphis has granted a permit to allow installation of a monitoring well on the side of Menager Road between Ragan and Rayner Streets. The drilling equipment will partially block that section of Menager Road for one to two days between November 11 and 16, 2004. The new well will be used to gather environmental data as part of the Depot's treatment remedy for groundwater as outlined in the Dunn Field Record of Decision (ROD).

The Memphis Depot Base Realignment and Closure Cleanup Team (BCT) and its environmental contractors began preparation for the early implementation of Zero-Valent Iron (ZVI) injection in October with the installation of seven additional off-site monitoring wells in the Depot community.

Based on the sampling results from these and other offsite monitoring wells, the BCT has approved the installation of seven more wells in November and December – including the well on Menager Road. These wells will establish a monitoring network around the treatment areas and provide sentry wells to monitor groundwater in areas with probable groundwater flow to deeper aquifers.

ZVI is considered a safe substance that presents no unacceptable risks to human health or the environment. When it is injected into groundwater containing chlorinated volatile organic compounds (CVOCs), a chemical reaction occurs that significantly reduces the CVOC concentrations. The community will not be exposed to the iron powder, which will be contained and injected under controlled conditions into the shallow aquifer 75-90 feet below the ground surface.

Two offsite treatment areas were selected for the early implementation of ZVI injection. The primary location is on the Memphis Light, Gas and Water (MLGW) substation property along Menager Road. The secondary area is along Rozelle Street on unoccupied properties owned by City of Memphis and Memphis/Shelby County. Based on the latest monitoring results, ZVI will be injected only on the MLGW property at this time.

The drilling equipment for installing the monitoring wells will consist of a large drill rig and a support truck, and additional support vehicles will be used during the ZVI injection. Prosonic Corporation will install the monitoring wells. ARS Technologies will install the injection borings and inject the ZVI. Both contractors will be under the direction of MACTEC Engineering and Consulting, the environmental contractor for the cleanup effort.

The monitoring wells will be installed November 8-17. The ZVI injections will take place between November 18 and December 30, 2004. Air quality monitoring and dust-control measures will be in place to minimize any disturbance to the community.

**For more information, please call the Memphis Depot Community Relations Office at (901) 774-3683.**



## **Approved groundwater remedy to be implemented in community**

**September 2004**—The Memphis Depot Base Realignment and Closure Cleanup Team (BCT) and its environmental contractors will begin the early implementation of a component of the approved cleanup remedy to treat groundwater in the Depot community this fall.

In June and August of 2004, the Depot installed additional groundwater monitoring wells in adjacent neighborhoods west of Dunn Field at the former Memphis Depot. The new wells are providing data needed to design and monitor the groundwater cleanup remedy for Dunn Field, as outlined in the Record of Decision (ROD). The remedy involves three components: 1) using Zero-Valent Iron (ZVI) placed in the ground as a Permeable Reactive Barrier (PRB); 2) injecting ZVI in areas where high concentrations of compounds are present; and 3) treating lower-concentration areas using monitored natural attenuation (MNA).

As the groundwater flows through the ZVI, the concentrations of chlorinated volatile organic compounds (CVOCs), such as the solvents found in the groundwater beneath Dunn Field, are reduced through chemical reactions with the iron.

Based on the data collected from the offsite monitoring wells, the environmental team was able to confirm the boundary of affected groundwater that has moved off-site from Dunn Field and determine where CVOC concentrations are the highest. The BCT recommended the early implementation of ZVI injection at two unoccupied sites adjacent to Dunn Field to treat the groundwater before the PRB is installed. The installation of the PRB is scheduled to begin in early in 2007.

To monitor the effectiveness of the ZVI injection, seven additional monitoring wells will be installed beginning October 4, 2004, at the two specified sites:

- Four wells on vacant property owned by the City of Memphis and Memphis/Shelby County along Rozelle Street, near the corner of Menager Road;
- Three wells on Memphis Light, Gas, and Water property:
  - One on each side of Menager Road near Ragan Street
  - One inside the MLGW substation, north of Menager Road

In addition to the monitoring wells, ZVI injection borings will be installed in a roughly linear pattern at both sites to depths of 85 to 100 feet below ground surface. The drilling equipment will consist of a large drill rig and a support truck. Prosonic Corporation will install the monitoring wells. ARS Technologies will install the injection borings and inject the ZVI. The ZVI injections will begin October 18 to 25, 2004. Additional support vehicles will be needed for the ZVI injections. Both contractors will be under the direction of MACTEC Engineering and Consulting.

The Depot anticipates drilling no more than five days at each site to install the monitoring wells. The ZVI injection should take no more than 30 days. The team will make every effort to minimize noise and disturbance to the community.

**The Depot's environmental team will be giving a presentation on the early implementation of ZVI injection at the Restoration Advisory Board (RAB) meeting on October 21, 2004. The meeting begins at 6 p.m. at the South Memphis Senior Citizens Center, 1620 Marjorie Street. The public is welcome to attend.**

**For more information, please call the Memphis Depot Community Relations Office at: (901) 774-3683**



## Groundwater monitoring program expanded in Depot community

**August 2004**—The Memphis Depot is expanding its off-site groundwater monitoring program and will install an additional seven groundwater monitoring wells in the Memphis Depot community between August 9 and 24, 2004. The data collected from these wells, and those installed in June 2004, will be used to design and monitor the groundwater cleanup remedy for Dunn Field, as outlined in the Record of Decision (ROD).

New monitoring wells will be installed in the following areas:

- On Memphis Light, Gas, and Water property:
  - south of Menager Road between Ragan and Rozelle Streets (155)
  - near the old railroad tracks on the south side of Menager Road near Ragan Street (151)
  - between Ragan Street and the old railroad tracks north of Menager Road (152)
  - between Ragan Street and the old railroad tracks south of Person Avenue (153)
- On Mississippi Valley Corporation property southeast of the railroad tracks and west of Rozelle Street (157)
- On RLR Investments' property below the power lines south of the railroad, adjacent to MW-67 (154)
- In the city right-of-way at the end of the cul-de-sac of Meadowhill Cove (156)

The drilling equipment will consist of a large drill rig and a support truck, operated by ProSonic Corporation under the direction of MACTEC Engineering and Consulting.

Sampling results from all monitoring wells will be used by the Depot to monitor groundwater conditions beneath the Depot community, and to clearly define the boundary of affected groundwater that has moved off-site from Dunn Field. The Memphis Depot Base Realignment and Closure Cleanup Team (BCT) will use the data to design a Permeable Reactive Barrier (PRB) as part of the approved remedy for groundwater.

A PRB is an underground barrier of iron particles, called zero-valent iron (ZVI). As the groundwater passes through the barrier, the ZVI naturally breaks down the chemicals, called volatile organic compounds, into safe compounds that degrade over time. Since the groundwater beneath the Depot community is deeper than 50 feet, the PRB will be formed by injecting a gel containing ZVI into the ground through a series of boreholes spaced five to 15 feet apart. The Depot's environmental team has proposed a 1,000-foot-long PRB located in the natural path of the groundwater flowing from Dunn Field. Using information from the monitoring wells, scientists can confirm the boundary of affected groundwater. This will allow the cleanup team to determine the best possible locations for the boreholes and the amount of ZVI required to achieve the best cleanup result.

The Depot anticipates drilling no more than two days at each well location. The team will make every effort to minimize noise and disturbance to the community.

The Dunn Field ROD is available for public reference in the Depot's three information repositories located at the Depot, the Cherokee Branch Library and the Memphis/Shelby County Health Department.

**For more information, please call the Memphis Depot Community Relations Office at the new number - (901) 774-3683.**



### **Work begins on groundwater cleanup remedy at Dunn Field**

**May 2004**—As part of the Memphis Depot's ongoing environmental cleanup program, seven groundwater monitoring wells will be installed in the Memphis Depot community. The wells will be used to collect data required to design and monitor the groundwater cleanup remedy for Dunn Field, as outlined in the Dunn Field Record of Decision (ROD).

**Monitoring wells will be installed near the following areas between mid-May and the end of June 2004:**

- **One well near the railroad tracks in the field west of Rozelle Street**
- **Five wells near the rail road tracks on Memphis Light, Gas, and Water property south east of Menager Road and east of Meadowhill Street**
- **One well near the intersection of Sparks Street and Dempster Avenue**

ProSonic Corporation will drill boreholes and install the monitoring wells under the direction of the Depot's contractor, MACTEC Engineering and Consulting. The drilling equipment will consist of a large drill rig and a support truck.

MACTEC will conduct the additional sampling to monitor groundwater conditions beneath the Depot community. The Memphis Depot Base Realignment and Closure Cleanup Team (BCT) will use the data to design the Permeable Reactive Barrier (PRB) and ensure it is functioning properly.

A PRB is an underground wall, filled with iron particles, called zero-valent iron, which allows the affected groundwater beneath Dunn Field to pass through. As the water flows through the iron particles naturally break down the chemicals, called volatile organic compounds, in the groundwater. The chemicals become safe compounds that degrade over time.

The Depot anticipates drilling no more than two days at each well location. The team will make every effort to minimize noise and disturbance to the community.

The Dunn Field ROD is available for public reference in the Depot's three information repositories located at the Depot, the Cherokee Branch Library and the Memphis/Shelby County Health Department.

**For more information, please call the Memphis Depot Community Relations Office at (901) 544-0613.**



## **NOTICE OF PUBLIC MEETING**

### **INTENT TO REISSUE A CORRECTIVE ACTION PERMIT**

**Date:** Tuesday, September 21, 2004  
**Time:** 6:30 p.m. (Central)  
**Location:** South Memphis Senior Citizens Center  
1620 Marjorie St., Memphis, TN

**Public Comment Period: Aug. 13 to Sept. 27, 2004**

The Tennessee Department of Environment and Conservation's (TDEC) Division of Solid Waste Management (DSWM) will conduct a public hearing on September 21, 2004, to receive comment on TDEC's proposal to reissue a permit for corrective action to the U.S. Department of Army, owner of the former Defense Depot Memphis Tennessee (DDMT), and the Defense Logistics Agency (DLA), the permit operator. The permit will include conditions for continuation of corrective action of solid waste management units and areas of concern.

The hazardous waste storage permit for the former DDMT was originally issued jointly by TDEC and the U.S. Environmental Protection Agency (EPA) on September 28, 1990. The permitted storage unit was never constructed and that portion of the permit was terminated on October 22, 1998. However, the corrective action portion of the permit remained in effect, including the requirement to reapply.

On March 31, 2004, the DLA submitted an application to TDEC to renew the corrective action permit. (TDEC has received full authority, in lieu of EPA, to regulate corrective action at the former DDMT.)

The draft permit identifies known solid waste management units (SWMUs) and areas of concern (AOCs) at the former DDMT. The owner and operator (permittee) shall be required to investigate any releases of hazardous waste or hazardous constituents pursuant to this permit, regardless of the time at which waste was placed in a unit, and to take appropriate corrective action for any such releases. All corrective action under this permit is deferred to, and being performed under, the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process.

*Cont.../2*

If issued, this permit renewal will continue to cover all applicable corrective action conditions under the authority of the Tennessee Hazardous Waste Management Act of 1977, as amended, Tennessee Code Annotated, Section 68-212-101, et seq. and Tennessee Rule Chapter 1200-1-11, Hazardous Waste Management. The permit is prepared in accordance with the provisions of Rule 1200-1-11-.07.

The permit, once issued, will be valid for 10 years, unless terminated upon approval of the Commissioner. The permittee shall submit an annual update for any newly identified SWMU(s) and AOC(s), or for existing units, whenever there is a change in the status of a unit or area.

Copies of DDMT's application, the draft permit and a detailed fact sheet are available for public inspection at the Memphis/Shelby County Public Library - Cherokee Branch, 3300 Sharpe Ave. These materials are also available for public inspection during normal business hours at the TDEC Memphis Environmental Assistance Center, Public Access Area, Perimeter Park, 2510 Mt. Moriah, Suite E-645 (Ph: 901-368-7939).

A 45-day comment period is required under the Hazardous Waste Management Act. The public comment period will begin on August 13, 2004, and will end on September 27, 2004.

**TO SUBMIT WRITTEN COMMENTS** or obtain further information on this proposed action, please contact:

**Clayton Bullington**  
**Division of Solid Waste Management**  
**Tennessee Department of Environment and Conservation**  
**5th Floor, L&C Tower, 401 Church Street**  
**Nashville, TN 37243-1535**  
**Phone: 615-532-0859**  
**E-mail: [clayton.bullington@state.tn.us](mailto:clayton.bullington@state.tn.us).**

Comments will also be received at the public meeting on September 21, 2004.

**All comments must be received by 4:30 p.m. on September 27, 2004, to assure consideration.** After considering all public comments received, the DSWM Director will issue a final permit decision and a Response to Comments.

For additional technical information on the environmental program at the former DDMT, contact Mr. Michael A. Dobbs, Environmental Manager, Defense Distribution Center. Phone (901) 774-3683 or write to Mr. Dobbs by E-mail at [Michael.dobbs@dla.mil](mailto:Michael.dobbs@dla.mil) or by mail at 2163 Airways Blvd., Building 144, Memphis, TN 38114.

If you wish to be included on TDEC's (DSWM) mailing list, please request a Mailing List Request form by contacting: Public Participation Officer; Division of Solid Waste Management; Tennessee Department of Environment and Conservation; 5th Floor, L&C Tower; 401 Church St.; Nashville, TN 37243-1535. Phone 615-532-0798 or E-mail [Solid.Waste@state.tn.us](mailto:Solid.Waste@state.tn.us).